CONTESSA MATIC E

(10.0645)

(1961)

SERVICE MANUAL

ZEISS IKON

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Repair Instructions

Contessa matic E, Cat.No. 10.0645

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General notes

The Contessa matic E, Cat.No. 10.0645 possesses the following features :

Shutter : Prontor SLK Special with speeds from 1 sec to 1/500 sec, B, MX synchronization and delayed-action release.

Lens : Tessar f/2.8, 50 mm, helical focusing mount.

Exposure meter : Coupled with the shutter, pointer reflected into the viewfinder and also visible externally on top plate. The exposure-meter instrument is identical to that of the Symbolica 10.0635.

Rangefinder : Coupled, visible in viewfinder.

A number of sub-assemblies are also employed in the Contessa matic 10.0634, the Symbolica 10.0635 and to a certain extent in the Tenax 10.0651. For example, the frame-counter mechanism, film transport, camera back. spool lever.

Care should be taken when repairing the camera to fulfil all the conditions specified in the assembly and repair instructions. Moreover the performance of the camera should accord with the standards laid down in the Testing instructions (page 27-30).

Especial caution must be paid when repairing components made of plastic materials, since these are easily scratched and are also strongly attacked by most cleaning agents. Even the vapour of trichlorethylene, methyl chloride or acetone may lead to a dulling of their surfaces. Excessive rubbing during cleaning should be avoided, since this may result in electrostatic charging and the consequent attraction of dust.

Caution: When ordering spare parts, both the order number and the name of part (as outlined with bold lines) should be quoted.
Slight variations may be encountered as the result of technical improvements.

Dismantling

Top capping, frame-counter mechanism (Ill. 2, 4, 8, 21).

Remove 2 oval-head screws 34, carefully lift off top capping ass, 197, unsolder control wire 119 from flash nipple, If necessary dismantle counter mechanism. Unscrew nut 26 with pliers 527/24 CM/82, remove counter disc 35, screw out threaded nipple 33 (lefthand thread) with spanner 56-00.000/800, lift out control ring 23 and control spring 18.
In a small number of cameras the top capping 196 was still employed. With these models the counter mechanism must always be dismantled first, before the top capping 195 can be removed.

Exposure meter with viewfinder (Ill. 7, 9).

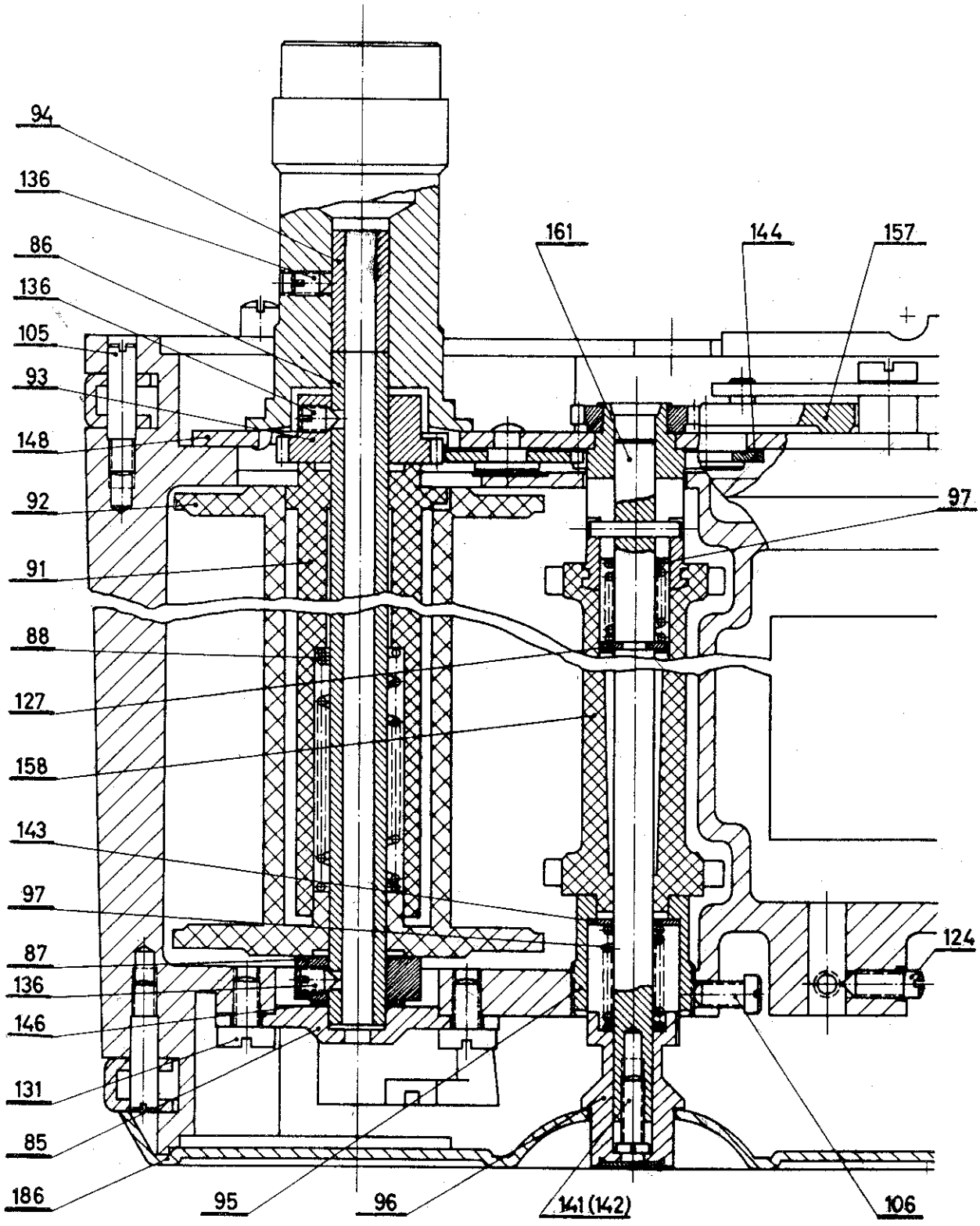
To avoid damaging the exposure-meter instrument and pointer when dismantling the meter, it is advisable to turn the aperture ring 344 in the direction of the fast shutter speeds until it stops. Then remove the 2 screws 45 and lift out the complete exposure-meter 212 with the finder.

Shutter-lens (Ill. 4, 5, 6, 17)

In order to dismantle the shutter, the 4 screws 46 (Ill. 4), which secure the front plate 316 on the camera body, must first be removed. Lift of front plate with shutter.
The shutter can be detached from the front plate by slackening the threaded mount 303. For this use spanner 55-00.000/806.
The focusing ring 333 can be removed as follows: slacken off 2 oval-head screws 341 slightly, lift off scale 36 (37), loosen 3 grubscrews 338 sufficiently to permit removal of focusing ring 333. The focus of the lens is later adjusted on the focusing ring 333 with the aid of the 3 grubscrews 338. Undo the 4 screws 312 and remove front plate 316 (take care of ratchet wheels 315). The complete front plate sub-assembly 291 can also be removed without having to dismantle the top capping and the exposure-meter. The assembly process is described in the section "Front plate-shutter-lens", page 5-6.

Rewind mechanism (Ill. 10, 15, 16)

Remove locking washer 127 (figs 10 and 15), lift out spur wheel 103 and washer 147. The spool lever compl. 164 can now be taken out from below (or through the cap ass. 186). The cap ass. 186 is secured with 2 screws 138. The plate ass. 176 is retained by screws 131.
To remove the holding mechanism for the spool lever compl. 164 (cam 101, lever 102 and lever ass. 162 with torsion spring 163), loosen the grubscrew 124 (Ill. 4).
No further details are required for dismantling the camera. Great care should be taken of all washers removed whilst dismantling the camera; they must all be restored to their original positions.


94
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86
136
105
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148
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88
127
158
143
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87
136
146
131
85
186
95
96
161
144
157
97
124
141 (142)
106

Assembly and Repair Instructions

The following assembly and repair instructions describe the reassembly of a completely dismantled camera; complete dismantling is however unnecessary in the majority of cases and it will have to be determined from one case to another how far the camera need be dismantled.

Film spool (page 2)

Insert the film spool 92 into the right-hand spool chamber so that its large opening is on top. The spool axle 86 with ring 87 (grubscrew 136 engages the bore-hole 2,9 mm from the end of the spool axle) is then slipped from below through the body and the film spool. Place washer 146 on ring 87 and screw bearing flange 85 to the underside of the body with 2 cylinder screws 131. Insert pressure spring 88 and bush 91 into the film spool from above. Slip spur wheel 93 (with toothed rim against bush) on to spool axle and screw tight. Grubscrew 136 will then engage the bore-hole 4 mm from the end of the spool axle.

Film sprocket roller (page 2)

Insert axle ass. 161 with compression spring 97 and locking washer 127 into the sprocket roller 158 from above. Place sprocket roller in body. Screw bush 95 into body (its inner, thicker part pointing towards the sprocket roller), so that the bush is flush with the outer surface of the body. Secure bush with screw 106 but do not tighten.

Tube (Ill. 5, 14, 15)

Insert axle 98 into body (Ill.5) and secure with grubscrew 137 (Ill. 10). Place cam 64 on tube 67 so that the feeler 68 scans the cam surface. Place washer 63 between ring 65 and cam 64 as required. The cam should run smoothly and without play. Secure ring 65 with 2 screws 66 from the inside of the tube 58. Check performance of cam and apply grease FM 6 to cam surface. The feeler 68 should not stick even though the cam is moved very slowly. Place tube 28 into body, insert winding wheel 38 together with tube compl. 58 and secure with 3 screws 53. The spring 69 is no longer employed. For this reason the spring 43 and screw 44 (see Ill. 10 and 13), which are built into the top of the camera body, are used.

Body contact for flash connection (Ill. 5,10)

Insulating piece 120, contact spring 121 with soldered control wire 119 and insulating washer 125 should be placed into the recess in the front of the body and secured with screw 126. The control wire is guided upwards and fitted into the channel provided on the upper side of the body. Follow this operation with an insulation test (see point No. 31 of the testing instructions),applying the voltage specified therein to the body (on one side) and to the contact spring (on the other).

Baseplate ass. (Ill. 10, 13)

Fit spur wheel 157 on to baseplate ass. 148 from above and secure with locking washer 144. Spur wheel 157 should run easily and without jamming.

Insert slide 107. The pre-assembled baseplate is then placed on the body and held in position. Check the correct engagement of teeth by rotating film spool 92. Before screwing-on the baseplate using 2 cylinder screws 132, place locking spring 113 and washer 139 beneath the inner screw. Slide the bush 94 from above through the hub of the baseplate ass. on to the spool axle 86 and secure with grubscrew 136 so that the film spool hasabout 0,1 mm play.

Slightly loosen screw 106, also bush 95, so as to leave an airspace of 0,1 mm between bush 95 and sprocket drum 158 (use 0,1 mm sheet metal for this purpose).

Tighten screw 105 in such a way that the bush will neither become unscrewed nor be pressed into an oval shape by the screw 106. Check the entire film transport mechanism for satisfactory performance.

Release Flap (111. 16)

2 cylinder screws 133 should be screwed into the base of the body by a few turns only. Position release flap 108 and spindle 111 with torsion spring 112. The torsion spring is slipped on to the spindle so that the longer end of the spring butts against the base of the body whilst the shorter end lies on the release flap 108, pressing it downwards (see 111. 16). Spindle 111 is held in position by 2 cylinder screws 133 which should not be screwed up too tightly.

Rewinding (111. 10, 15, 16)

Insert the plate ass. 176 into camera body and secure with 2 screws 131. Spool lever compl. 164 with locking plate 122 and compression spring 123 should now be inserted from below through the housing and the bearing hole of the plate ass. 176. Slip washer 147 and spur wheel 109 (burred edge facing downwards) over the end of the axle. The spool lever is secured with locking washer 127. The axial play of the spool lever should not exceed 0,1 mm. Turn camera upside down and place lever 102 on the base of the body (111. 16) and fit lever ass. 162 together with torsion spring 163 on top. Fit cam 101 into body and secure with grubscrew 124 (111. 4). Hook on torsion spring 163 as shown in 111. 16. Final adjustment of cam 101 follows later (page 10) after the cap 186 has been fitted.

Test: In unfolded position the crank of the spool lever 164 should rotate easily and without jamming, engaging the catch of the film rewind on plate ass. 176. When the crank is folded back, the catch should be uncoupled. Its friction should not exceed 60 cmg.

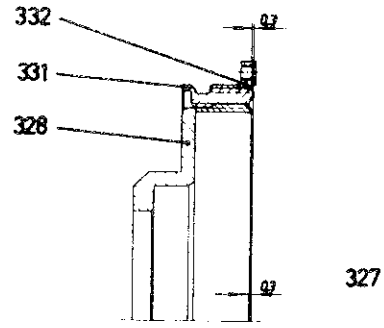
Traveller ass. (111. 10, 12)

Hook draw spring 118 to the pin on the body (111. 10) and secure with grip ring 145. Place traveller ass 177 on the riveted brass bushes of the baseplate and test its performance. The traveller should move freely and smoothly along the entire length of its guide slots. Fit 2 cylinder screws 128 (free from grease but with safety lacquer around the thread) into the brass bushes and tighten them. When screwing in the 2 cylinder screws 128 care should be taken that the two pins of the winding wheel 38 are in an almost horizontal position. (see 111. 5). Check the performance of the traveller once again. Hook spring 118 into the slot in the traveller.

Rotate spur wheel 157 in a clockwise direction until one of its pins butts up against the traveller. Hold traveller and spur wheel at their highest position and adjust the locking spring 113 by moving it until the spur wheel 157 is almost free from play. Under no circumstances should the locking spring recoil against the flank of any tooth, thus resulting in the pin of the spur wheel 157 being pressed against the traveller 177 which then could not be moved back to its normal position by the action of the draw spring 118. The same testing procedure should then be applied to the other bolts of the spur wheel 157 (turned through 180^{0}); then tighten cylinder screw 132. The mesh of the locking spring 113 with the teeth of the spur wheel should be gentle enough to prevent noisy winding.

Front plate - shutter - lens (Ill. 1-6, 11, 17-20)

Grease inner threaded ring 328 with FM 1 and screw it into threaded ring 331 from the front, so that the inner ring 328 lies just 0,3 mm within the ring 331 (see diagram). Insert outer threaded ring 332, so that it lies above the inner threaded ring 328 (see diagram).



The hole for the shutter-tensioning spindle in the inner threaded ring 328 must therefore lie midway between any two lugs on the outer threaded ring 332 (Ill. 19). The focusing ring 333 is now fitted so that the pin of the focusing ring 333 lies close to the long aperture of the inner threaded ring 328, and at the same time abutts against the lug of the outer threaded ring 332, as shown in Ill. 19.

Tighten the 3 grubscrews 338 gently and uniformly. Place the front plate ass. 316 on the threaded ring ass. 327 together with focusing ring ass. 333, and secure with 4 screws 312. Here 4 spring washers 315 should be employed, to prevent subsequent loosening of the 4 screws 312.

The inner threaded ring 328 must move with no radial play, in order to ensure that the rangefinder develops no backlash. The radial play can be adjusted by means of angle stop 297. Insert the insulating piece 324, contact spring 342 and insulating washer 326 and secure with screw 325. Place the now partially-assembled front plate on the shutter, fit the release ring 296, screw on firmly shutter by means of threaded mount 303, using key 55-00.000/806. The release ring 296 must run smoothly.

Since the threaded rings 328, 331 and 332 are fitted together by being ground against each other at the factory, it is advisable not to order individual threaded rings, but rather all 3 rings together under order No. 327 (10.0645-05.047-U threaded ring ass.)

Perform insulation test by placing pole 1 on contact spring 342, pole 2 on earth (tensioning spindle of shutter can be used as earth in either tensioned or run-off condition); see Testing Instructions, Points 31 and 32. Mount scale 295 with 2 screws 302, place filmspeed ring 294 in position, secure spring ass. 352 with 2 screws 311. Insert diaphragm ring ass. 344 so that the lower lug of the shutter-aperture-ring engages the central groove of the diaphragm ring 344. Insert washers 306 (307) as required between the diaphragm ring 344 and the shutter-speed scale ring 293. Place the speed-scale ring 293 in position and secure against rotation with grubscrew 313 (secure screw with lacquer). Fit the shutter-speed setting ring 301, so that the inner opening engages the speed cam of the shutter, and the outer keyway the upper lug of the shutter-aperture-ring. Mount the front ring 292 with 2 oval-head screws 310. Use washers 308 (309) as required. The washers 308 (309) should only be employed if the diaphragm ring 344 and the speed-setting ring 301 move too stiffly. Otherwise, excessive play in the rings should be compensated by placing washers 306 (307) between diaphragm ring 344 and speed-scale ring 293.

Hang rod 298 with slotted nut 32.

Set film-speed scale to 64 ASA shutter speed to 1/30 sec and aperture to f/22. The sutter must be run off. Adjust carrier lug of cam 64 to level of feeler pin 68 (see Ill. 5). The winding wheel 38 should be set as shown in Ill. 5.

Fit front plate compl. 291, takihg care that

a) the slotted nut 32 lies beneath the release plate 108;

b) The contact spring 342 runs within the contact spring 121 (contact spring 342 should not therefore come into contact with cam 64);

c) the lug of the spring ass 352 engages the recess in cam 64.

Secure front plate compl. 291 with 4 screws 46.

Test: When the diaphragm ring 344 is moved, the lever compl. 74 must move with it.

The front plate compl. 291 can also be mounted together with the shutter and lens, if the viewfinder, exposure meter and top capping are already fitted. In this event only the assembly instructions given above need be observed (points a, b, c and Ill. 5).

Back locking catch (Ill. 4, 13)

Catch 114 with compression spring 116 should be fitted to the side wall of the camera body so that the compression spring engages in the recess of the body. Whilst holding both the catch and spring in this position, place 2 rings 115 into the guide slots of the catch, put on cover plate 117 and secure with 2 countersunk screws 134.

Camera Back (Ill. 11, 13, 16)

The camera back is attached to the body with 2 threaded pins 105. Apply safety lacquer to the threads of these pins.

Note: Ordering Spare Parts

When ordering a new camera back it is not sufficient to quote the serial number of the camera under repair; it is also necessary to return the damaged back to us.

Tensioning Lever (Ill. 4, 21)

Insert the spur wheel 11 so that lowest point of the traveller key-way is separated by 2 teeth from the grubscrew 105 (towards the back). Place on top of the sleeve 12 a paper washer 14, then the tensioning lever 17, a steel washer 15 and a spring washer 16. Screw together with 3 cylinder screws 47. Insert pin 13 into the bore hole of the sleeve 12 and place the assembled tensioning lever on the hub of the baseplate 148. Slide torsion spring 27 over sleeve 12 and hook into the lug of the tensioning lever 17. Insert release rod 42 with compression spring 24 and locking washer 54.

Position assembled flange 56 on hub of baseplate 148 and hook torsion spring 27 after one complete turn for tensioning into the spring rivet of flange 56.

Insert release nipple 25 and provisionally tighten threaded nipple 33. Attach leafspring 21, washer 22 if required and angle-stop 55 with 2 screws 48.

Adjusting the Traveller (Ill.10, 12)

The traveller 177 can be adjusted by two different methods:

a) with tensioning lever 17 fitted

b) without tensioning lever, using key 527/24/82 in its place.

Release and tension the shutter so that the traveller 177 takes up the furthest possible tensioning position. Whilst it is moving, observe whether the draw spring 184 is tensioned just before the traveller reaches its terminal position. In fact, the draw spring 184 should be just about to be tensioned when the traveller reaches its highest position.

Adjustment is made as follows: When the traveller 177 is at its highest position, loosen cylinder screw 185 (1/4-1/2 turn), and rotate cam 182 (key 52-01 076/800) so that its stop can be felt on the traveller.

In this position tighten and lacquer screw 185.

Spring is tensioned during test winding : turn cam in counter-clockwise direction.

Shutter runs off by itself during test winding : turn cam in clockwise direction.

Lens focus adjustment (Ill. 2, 3.)

The focusing ring 333 should be turned until the lens is focused exactly to ∞ in the collimator (see Testing instructions, Point 33). Then slacken the 3 grubscrews 338 and set the focusing ring 333 to the ∞ stop. Tighten the 3 grubscrews 338 evenly and secure with Zapon lacquer. Re-check focusing once again. Fit distance scale 36 (37) and tighten the 2 oval-head screws 341 which retain both the distance scale 36 (37) and the finger-grips 335 and 336.

Adjusting the Tensioning Lever (Ill. 10, 21)

Tension and release the shutter several times. The tensioning lever 17 will travel slightly beyond both stop positions. By pressing the sprocket roller to the left, i.e., in the direction of the backwards-moving film, and slowly moving the tensioning lever, the transporting movement of the film sprocket roller will start only after a slight idling movement of the tensioning lever. When the tensioning lever has been swung to its positive stop and slowly released again (sprocket again pressed in direction of backwards-moving film), a play can be observed between the stops of the lever and those of the sprocket roller. Both these idling movements should be of approximately identical duration. It is permissible for the idling period to be slightly longer at the beginning of the lever's movement than that at the end, but never in the reverse order. Correct adjustment of the idling period can be obtained by moving the lever 17 towards the sleeve 12 after slackening the 3 screws 47.

Exposure meter, viewfinder, rangefinder (Ill. 7, 9, 12)

The assembly of the viewfinder and rangefinder can be seen in Ill. 9. Care should be taken to ensure that the coated side of the mirror 215 is placed to the rear, facing towards the eyepiece lens 214. The broad side of the coated mirror mask 256 should face forward in the direction of the mask 244. The brightline frame should be aligned so as to agree with the image field of the camera; see Testing instructions, Point No. 35. Cement the mask in position. At a film-speed setting of 100 ASA, set the shutter to 1/500 sec at f/22. The lever 74 on the tube 58 will move backwards in the direction of the camera back 187. Set the focusing ring 333 to the closest distance. Move slide 107 forwards in the direction of the shutter, up to its stop. Insert the exposure meter 212 with the viewfinder, so that

a) the lens bearer 251 lies behind the slide 107

b) the lever 74 lies behind the scanning lever of the plate 286.

Secure exposure meter compl. 212 with 2 screws 45.

Test : When the diaphragm ring 344 is turned, the exposure meter should move likewise. The lever 74 should move without obstruction along its track in the exposure meter housing.

The glass disc 263, which was incorporated in a small number of cameras, is no longer employed. The spring 242 is therefore cemented to the meter housing, and, after the image field has been adjusted, the viewfinder mask 244 is cemented to the spring 242.

Exposure meter - Zero position

The zero-position should be checked when the photo cell is completely covered. The position will be correct when, at a setting of 16 ASA, the diaphragm ring 344 is turned in the direction of "B" until it stops and the exposure meter pointer lies within the front triangle (looking towards the lens) on the external meter window. The zero-position is obtained by adjusting the cam on lever 74.

Exposure meter calibration

The exposure meter calibration can be tested only when the instrument is assembled in its working position, that is to say, only in conjunction with the camera. Both aperture and speed values are set on the camera according to the table in the Beli-Prüfkoffer VE 33 (exposure meter testing case VE 33). Calibration corrections in the upper measuring range can be obtained by changing the resistor. In the lower measuring range the calibration corrections can be effected by changing either the disc 261 or the photo cell 236 if necessary. The maximum permissible deviation of the calibration values is ± 1/2 stop.
With the Contessa matic E 10.0645, resistors of between 16 and 40 kOhm are generally used. Resistors up to 20 kOhm rising by steps of 0,2 kOhm are available. Above 20 kOhm the steps rise by 0,5 kOhm.
The resistor values are denoted by either coloured rings or coloured dots.

Colour :	1st ring or dot = 1st fig.	2nd ring or dot = 2nd fig.	3rd ring or dot = number of zeros	4 th ring or dot = tolerance
black	0	0		
brown	1	1	0	
red	2	2	00	
orange	3	3	000	
yellow	4	4	0000	
green	5	5	00000	
blue	6	6		
violet	7	7		
grey	8	8		
white	9	9		
gold				± 5%
silver				± 10%

Read from left to right, with tolerance ring (gold or silver) at right-hand side.

Example :	violet	green	red	silver				
	7	5	00	± 10 %	=	7 500 Ohm	=	7,5 kOhm ± 10 %
	green	orange	red	silver				
	5	3	00	± 10 %	=	5 300 Ohm	=	5,3 kOhm ± 10 %
	brown	red	orange	silver				
	1	2	000	± 10 %	=	12 000 Ohm	=	12,0 kOhm ± 10 %

To compensate for the effects of temperature on the calibration, the Contessa matic E has been fitted with thermistors of between 8 and 16 kOhm.

When repairing exposure meters fitted with thermistors the following facts should be considered:

1) Thermistor and resistor are wired in series.
2) The thermistor is highly temperature-responsive. Resistance measurements should be taken at 20-25°C (68-77°F). After soldering, time should be allowed for cooling-off.
3) The thermistors are extremely sensitive to mechanical stress.
4) Resistance values are here denoted by 2 colour dots on the body of the resistor.

The greatest possible care should be exercised when bending ends of wires and when adjusting them after soldering.

Colour code : The colour dots denote the resistor values in kOhm. The dot next to the front denotes the full kOhm-value, the second dot near to the centre of the body denotes the first digit after the decimal point.

Key to code :

0 = Black	5 = green
1 = brown	6 = light brown
2 = red	7 = dark brown
3 = orange	8 = grey
4 = yellow	9 = white

Example : 5,8 kOhm = green - grey

6,2 kOhm = light brown - red

The share of the thermistor (stabilizing resistor) in the total resistance value should be 30 - 40 %.

Example :

Standard resistor	=	16 kOhm.
Thermistor	=	8 kOhm.
Total resistance value	=	24 kOhm

Adjusting the rangefinder (Ill. 9, 12)

Slight vertical variations can be adjusted by turning screw 254. Secure screw 254 with lacquer. Larger variations must be adjusted by means of the 2 grubscrews 268, which hold the adjustable lens 252. For this, the grubscrew 266 (Ill. 9) must be loosened slightly. After completing the adjustment, tighten grubscrew 266. Secure the grubscrews 266 and 268 with lacquer. Cement the adjustable lens 252 to the lens bearer 251. Secure the cover plate 243 with 1 screw 278. The ∞ - adjustment of the rangefinder is performed with the aid of special screwdriver 55-00.000/805. For this, slacken screw 31 (Ill. 4). The ∞ - adjustment can also be performed when the camera is fully assembled. After adjustment, screw up screw 31. The threaded pin 281 has the function of providing a third point of support for the exposure meter housing, in order to eliminate tensions which may arise later, thus giving rise to irregularities in the rangefinder. The threaded pin 281 must be secured with lacquer.

Top capping (Ill. 2, 8, 10)

Solder control wire 119 to the flash contact inside the top capping. Position finder eyepiece 204, put on top capping 197 (see that control wire 119 is not trapped) and secure with 2 screws 34.

Frame Counter (Ill. 21)

Loosen threaded nipple 33, insert control spring 18, place control ring 23 on top and tighten threaded nipple 33 (left-hand thread) with key 56-00.000/800. Both control spring 18 and leaf spring 21 should be adjusted for over-draw when in this position. Rotate the control ring 23 so that the tips of the springs can be observed through its slots. When tensioned, leaf spring 21 should engage the teeth of the control ring 23 in time for the control ring to make just one more movement of 0,2 - 0,4 mm before the tensioning lever comes to a stop. When the tensioning lever travels back, the control spring 18 should engage in time for the control ring to make an idling movement of 0,2 - 0,4 mm before the lever reaches its rest position. Adjustment can be made by moving the leaf spring 21 after loosening the 2 screws 48.

Counter Disc (Ill. 2, 21)

Insert counter disc 35 in such a way that an imaginary line passing through the 10 and 30 strokes on the scale runs parallel to the camera back (number 1 on the disc pointing to the rear towards the camera back). Follow this coarse alignment by positioning the counter disc so that one stroke mark is exactly opposite the black index mark on the control ring 23. In this position use shearing tool 527/24 CM/82 to shear-in the counter disc opposite the recess. Use pliers 527/24 CM/83 (tool not absolutely essential) for adjusting nut 26 and tighten it with pliers 527/24 CM 82. Secure thread with chrome safety lacquer.

Adjusting release and "B" setting (Ill. 2, 5)

Tension and release the shutter several times. Set shutter to "B" . Slowly release the tensioned shutter, closely observing the travel of the release nipple 25 from the moment of release to its final stop. Let the release nipple 25 come up very slowly and watch carefully its movements between closing the shutter and the rest position of the release nipple. These two idling movements should be of approximately identical duration. Adjust by means of slotted nut 32, using special screwdriver 26 376 T/80. Apply lacquer to slotted nut 32.

Capping 186 with Plunger 96 (Ill. 3, 16, page 2)

Screw-in cylinder screw 141 (142).

Slip washer 183 and then compression spring 97 over axle of sprocket roller and place plunger 96 on top. Secure capping ass. 186 with 2 countersunk screws 138 and adjust de-coupling of film sprocket using screw 141 (or 142 as required), so that following conditions are fulfilled :

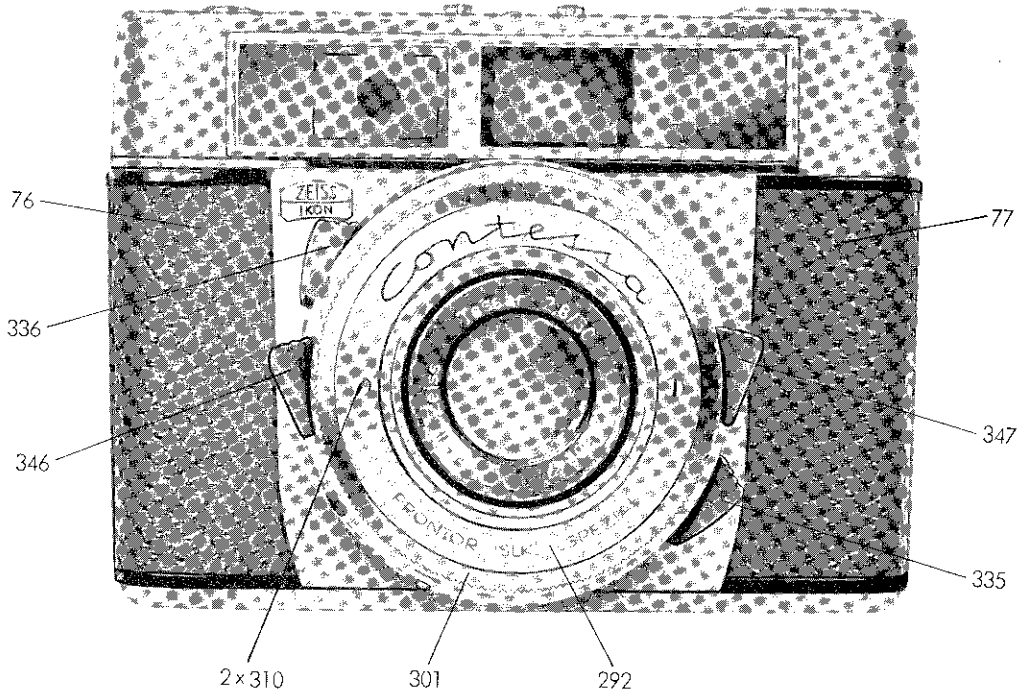
1) When plunger 96 is completely depressed, the spool lever 164 must spring out and the film sprocket should be de-coupled completely. (Use screw 141 (142) for adjustment).
2) When spool lever 164 is depressed to its rest position (Ill. 3), plunger 96 should spring up once again and couple with the film sprocket.

For adjusting conditions 1 and 2, use screw 141 (or 142) as required, passing a thin screwdriver through plunger 96. The spool lever 164 should be held tightly when pressing it home into capping ass. 186. Adjust by rotating cam 101 after loosening grubscrew 124 (Ill. 4). Follow up by tightening grubscrew 124 again and secure with lacquer. Repeat tests as described under " Rewinding " section on page 4.

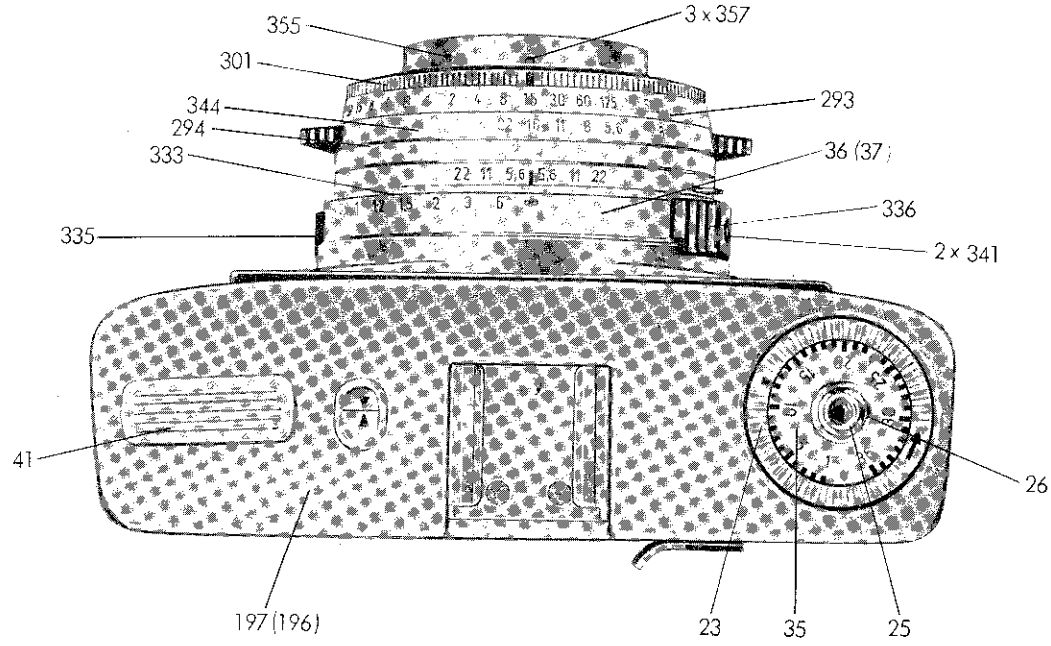
Fault - finding - key

Fault		Cause	Remedy
1.	Film partly or entirely unexposed	Shutter does not open	Repair according to instructions for Prontor SLK Special shutter
2.	Double exposure or film is not advanced	Spool lever 164 not pressed home completely	Depress spool lever completely
3.	Irregular frame spacing	Locking spring 113 either brocken or bent	Replace spring and adjust according to instructions on page 4
4.	Unsharp pictures	Lens focusing ring 333 is loose	Adjust lens using collimator, secure focusing ring with 3 screws 338
		Rangefinder out of adjustment	Adjust rangefinder (Page 9)
		Lens greasy or dirty	Clean lens
5.	Over-exposed pictures	Exposure meter calibration is inaccurate	Test and correct calibration using Beli-Prüfkoffer VE 33
		Exposure meter pointer jamming	Remove obstruction. Replace meter if pivotpoint is faulty
6.	Under-exposed pictures	Exposure meter calibration is inaccurate	Test and correct calibration, using Beli-Prüfkoffer VE 33
7.	Torn perforation of film	Obstruction in film cassette	Replace with faultless film cassette
8.	Scratched film	Faulty cassette	Exchange for faultless cassette
		Damaged pressure plate	Replace pressure plate
		Damaged film track	Repair damage
9.	Cocking lever cannot be operated or does not complete its travel	Traveller 177 jams	Correct movement of traveller
		Spur wheel 157 moves too hard.	Correct movement of spur wheel.
		Cogwheels obstructed by foreign bodies	Remove obstructions
10.	Counter mechanism fails to advance	Tooth broken on control ring 23	Exchange control ring
11.	Exposure meter pointer fails to deflect	A break in the wiring a soldered connection or in the instrument	Use circuit tester for locating break in circuit and remedy
		Photo-cell is damaged	Test photo-cell using Beli-Prüfkoffer VE 33
			Caution: limit current in circuit-tester to below 50 µa
12.	Vertical displacement in rangefinder	Adjustable lens 252 loose	Secure adjustable lens to lens bearer and adjust vertical displacement as described on page 9.
13.	Rangefinder out of adjustment at ∞	Adjusting screw 268 loose	Adjust rangefinder and tighten adjusting screw with special screw-driver 55-00.000/805

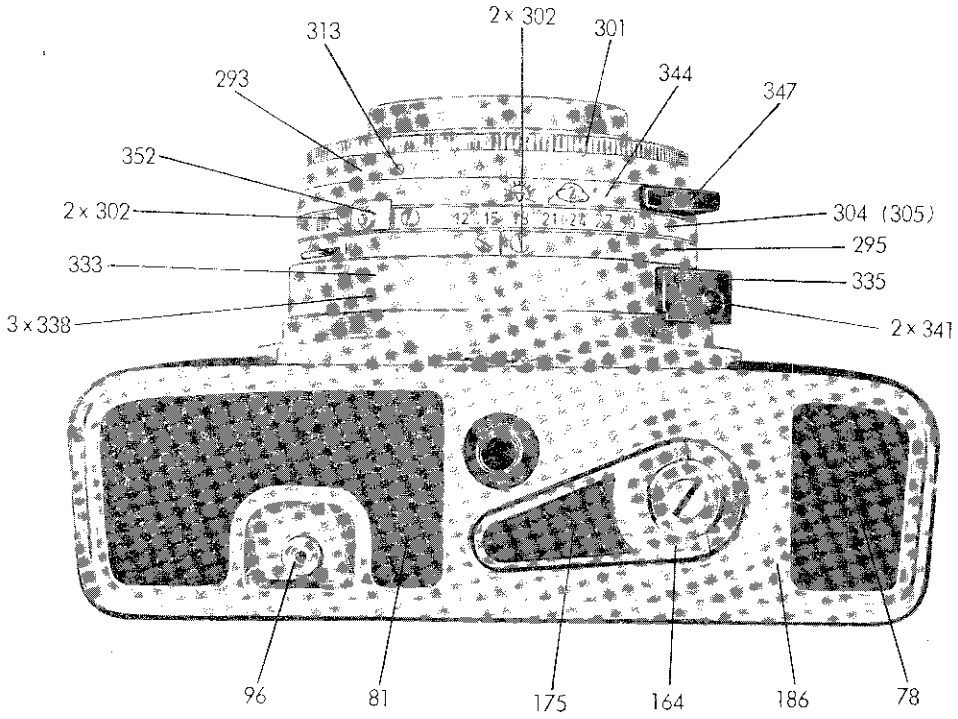
Fault	Cause	Remedy
14. Shutter does not close on B-setting	Slotted nut 32 is out of adjustment	Adjust nut 32 according to instructions page 10, secure with lacquer.
15. Shutter does not operate on B-setting	B-lever in shutter is defective	Exchange B-lever
16 Shutter is released during tensioning	Shutter release lever sticking	Correct movement of shutter release lever, otherwise change lever
17. Exposure-meter pointer jamming	Foreign body obstructing movement	Remove obstruction
18. Spool lever 164 cannot be pressed home completely	Cam 101 is displaced	Adjust cam (see page 10)
19. Spool lever 164 fails to spring out when plunger 96 is depressed	Cam 101 is displaced	Adjust cam (see page 10)
20. Film is not transported upon rewinding	Spur wheel 103 has too much axial play	Reduce axial play to 0.1 mm max. Burred edge of spur wheel points downwards in direction of rewind spool plate 176
	Spur wheel 103 is defective	Change spur wheel


76
336
346
77
347
335
2×310
301
292

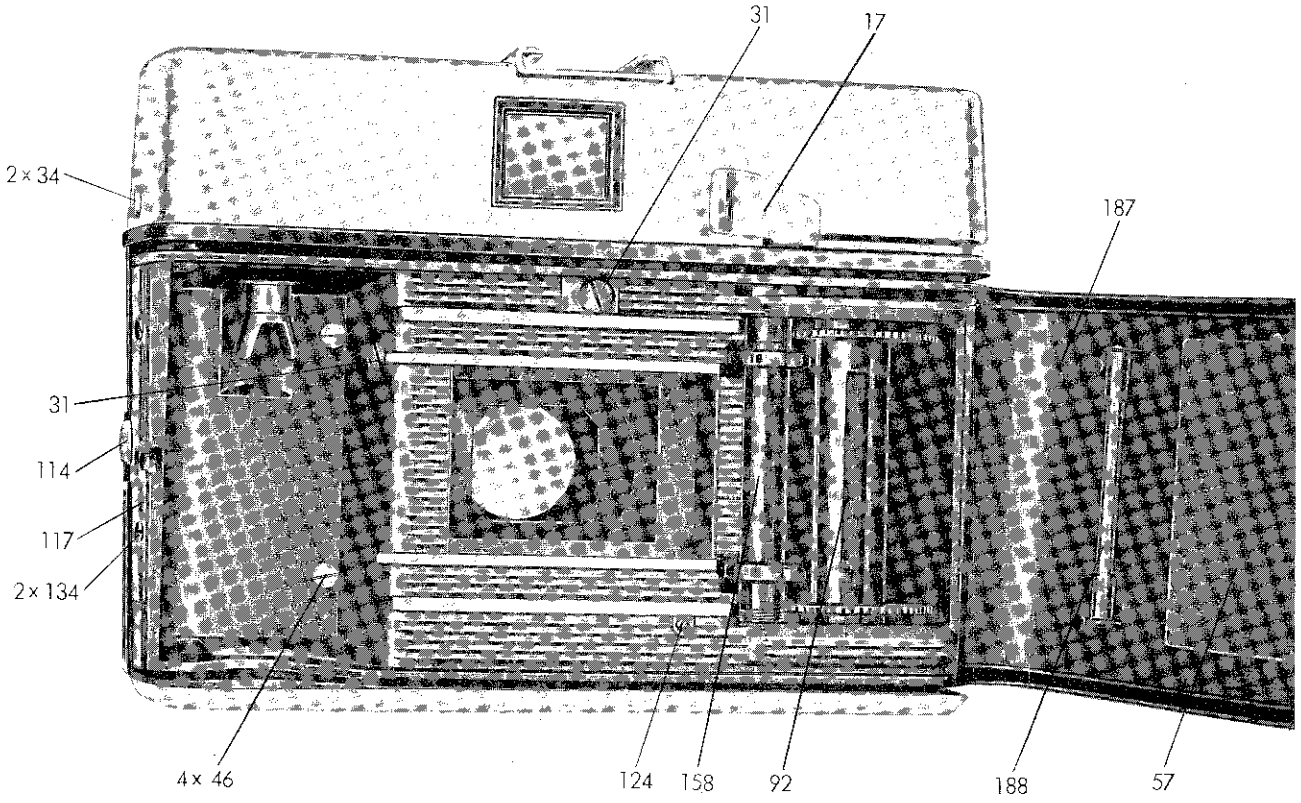
Ill.1


355
3×357
301
344
294
333
293
36 (37)
336
335
2×341
41
26
197 (196)
23
35
25

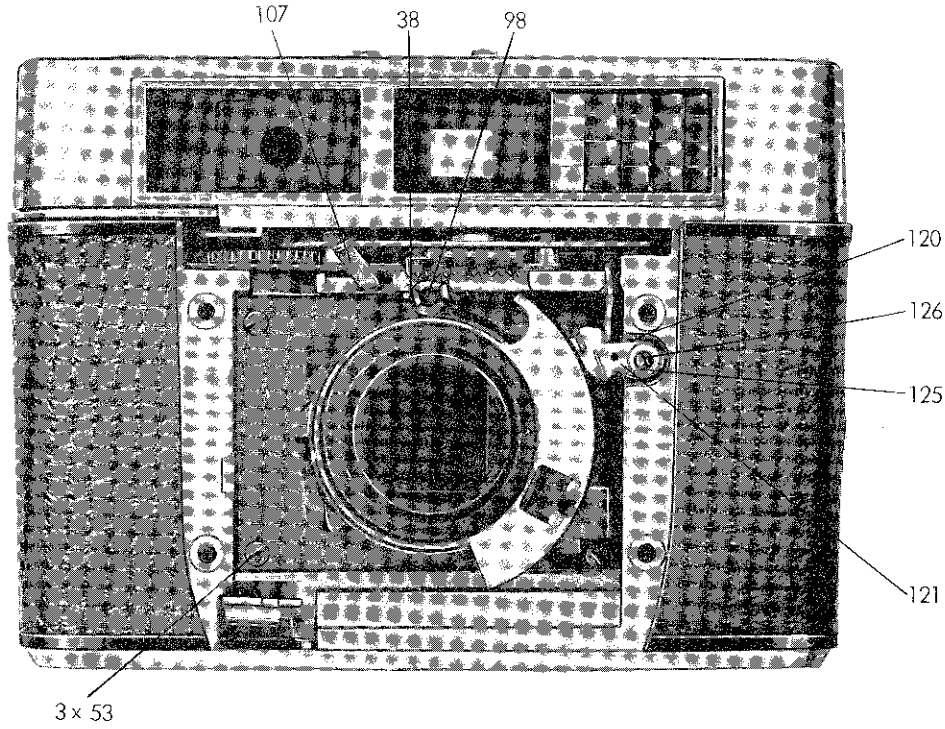
Ill.2

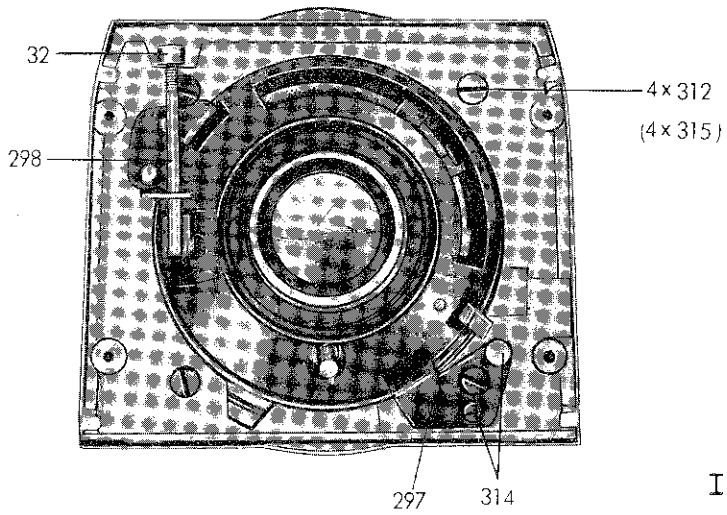

313
2 x 302
301
293
344
347
352
2 x 302
304 (305)
295
333
335
3 x 338
2 x 341
96
81
175
164
186
78

Ill.3

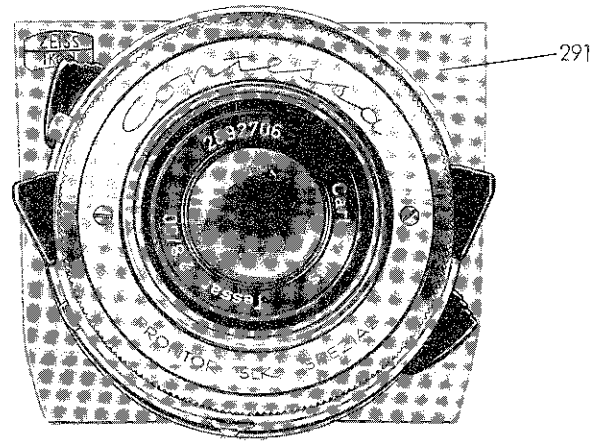

31
17
2 x 34
187
31
114
117
2 x 134
4 x 46
124
158
92
188
57

Ill.4

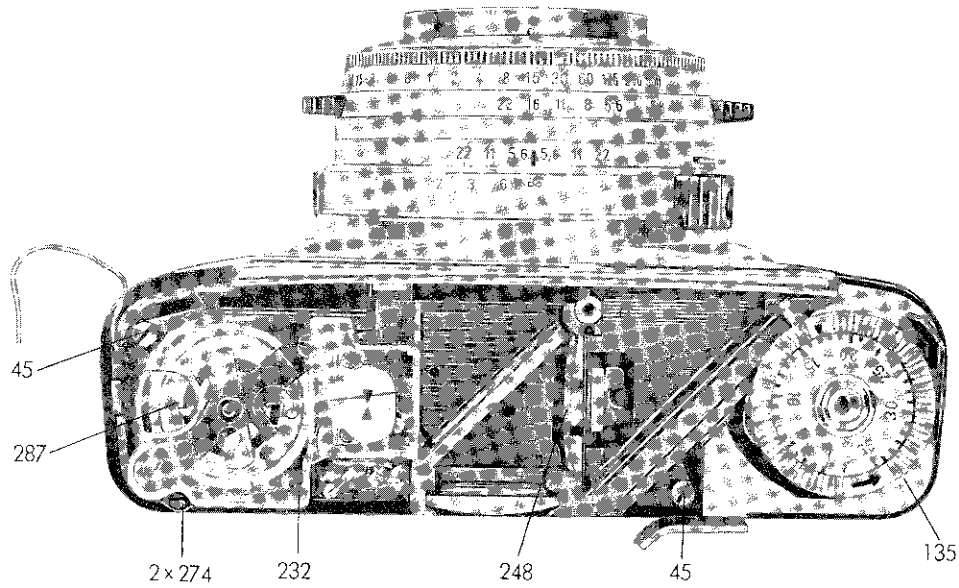

107
38
98
120
126
125
121
3 x 53


32
4 x 312
(4 x 315)
298
297
314

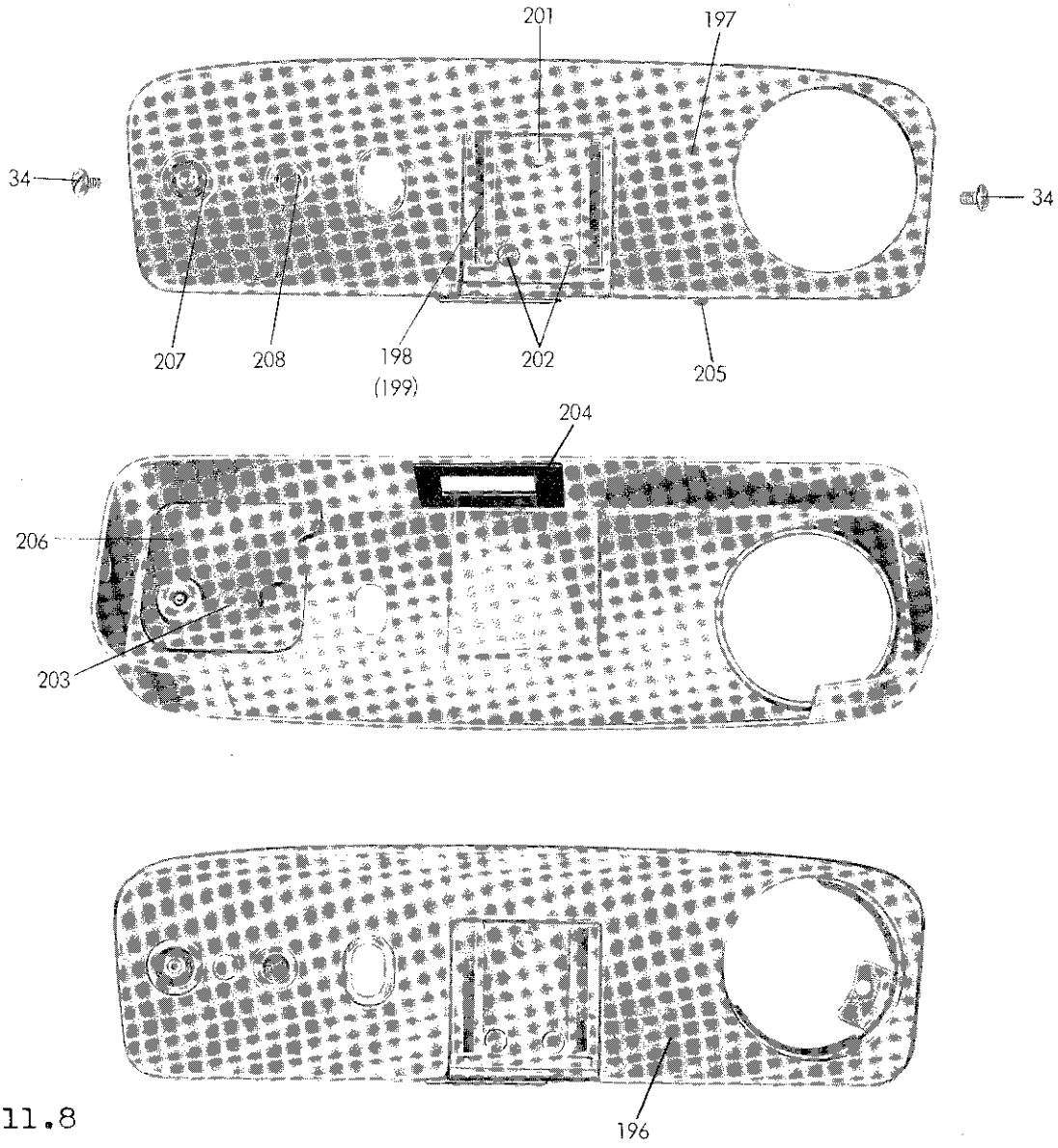
Ill.5


ZEISS
291

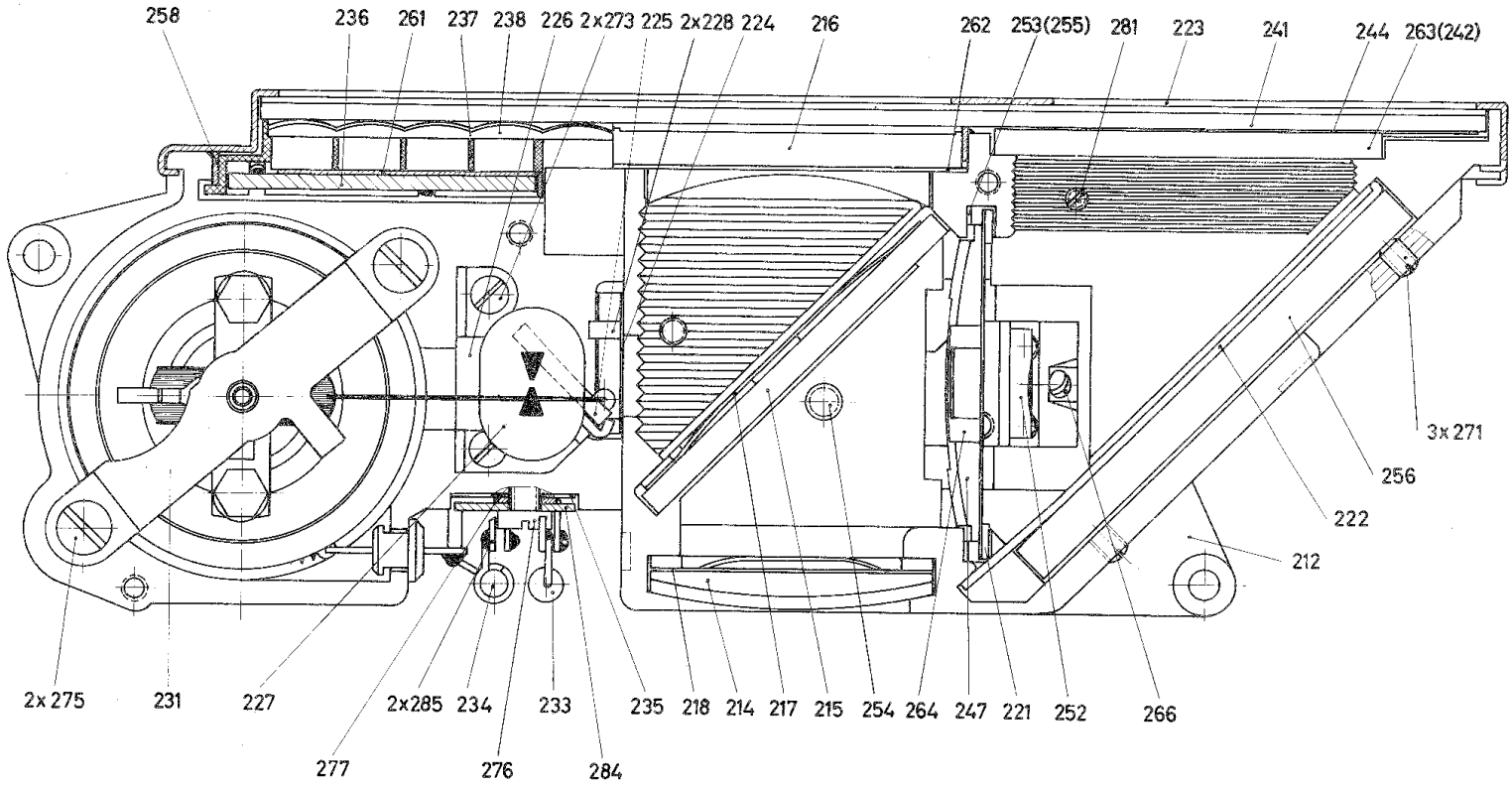
Ill.6


45
287
2×274
232
248
45
135

Ill.7

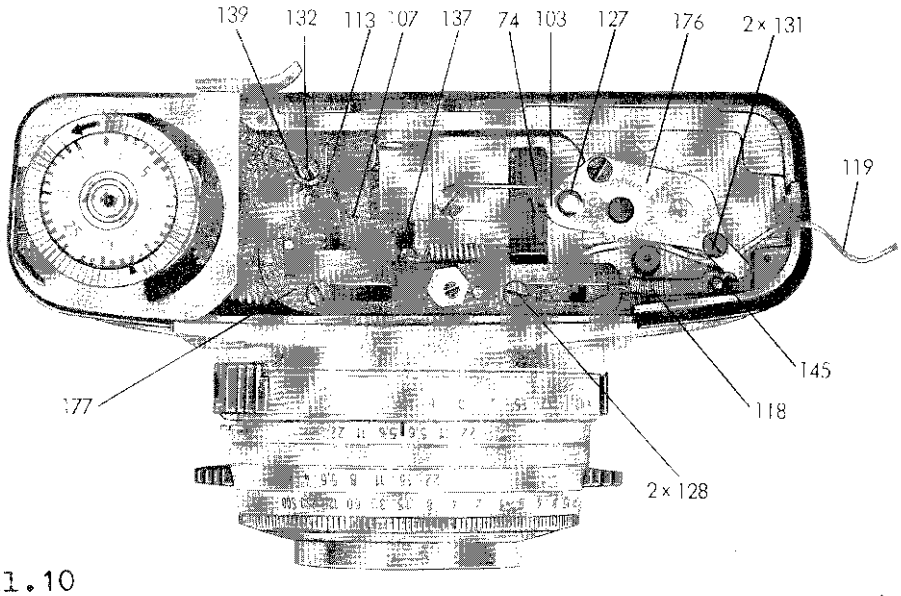

201
197
34
34
207
208
198
(199)
202
205
204
206
203
196

Ill.8

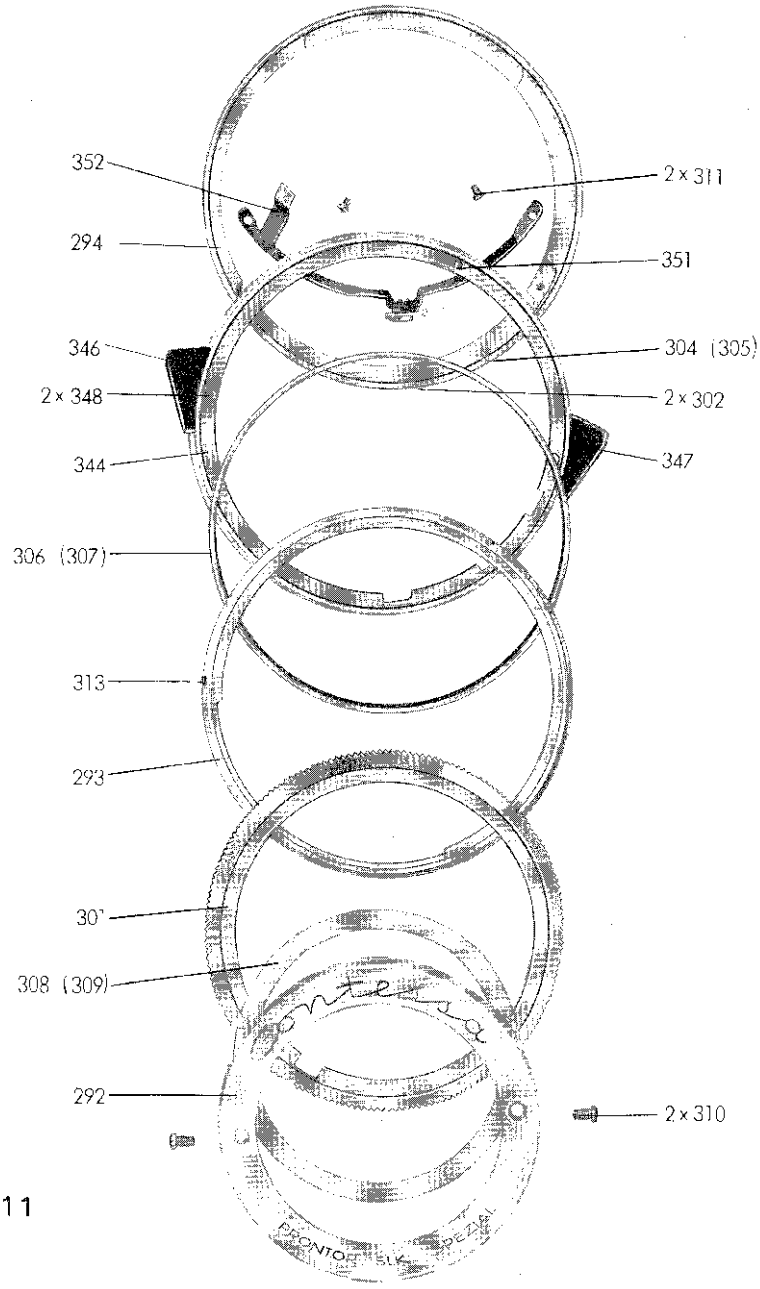

258
236
261
237
238
226
2x273
225
2x228
224
216
262
253(255)
281
223
241
244
263(242)
3x271
256
222
212
2x275
231
227
2x285
234
233
235
218
214
217
215
254
264
247
221
252
266
277
276
284

10.0645

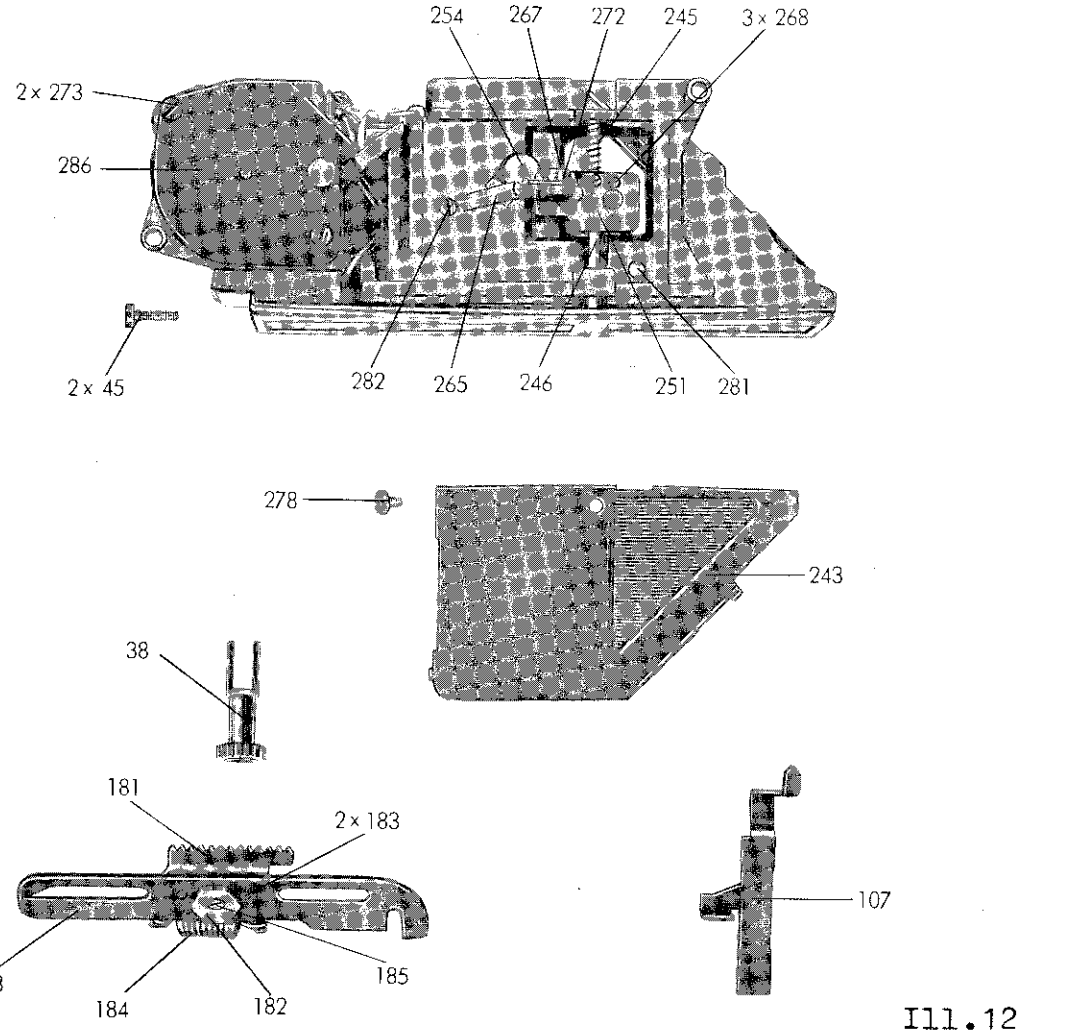
Fig. 9


139
132
113
107
137
74
103
127
176
2 × 131
119
145
118
177
2 × 128

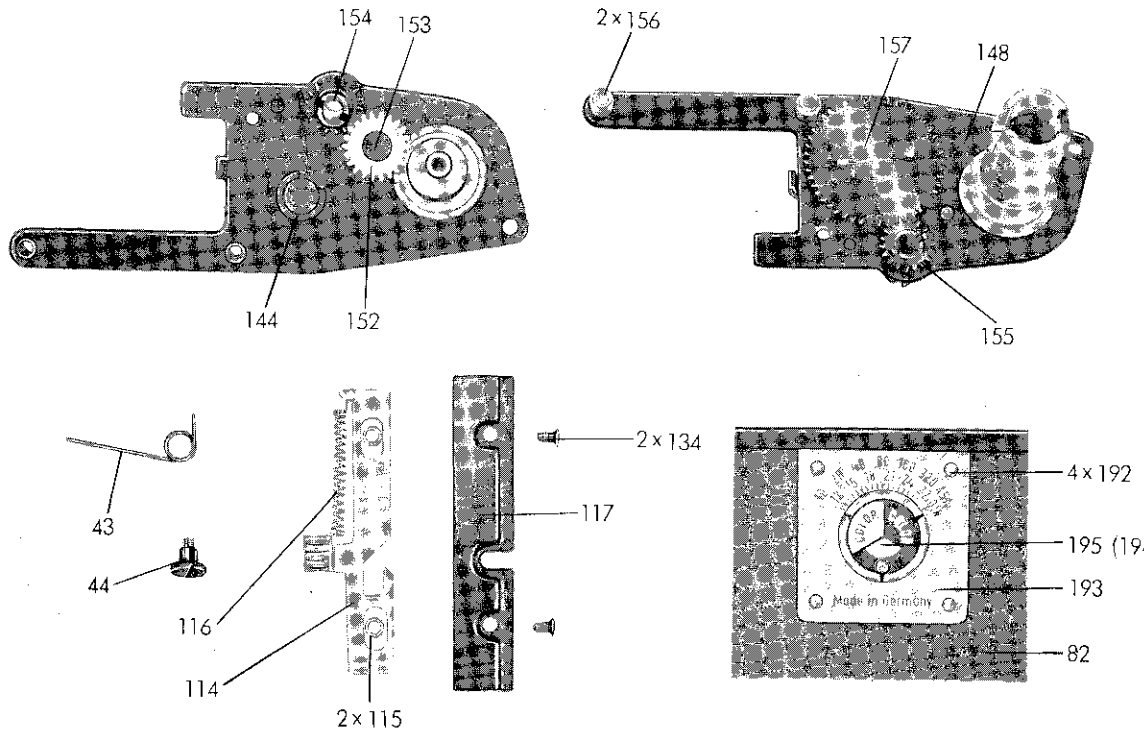
Ill.10


352
2 × 311
294
351
346
304 (305)
2 × 348
2 × 302
344
347
306 (307)
313
293
30
308 (309)
292
2 × 310

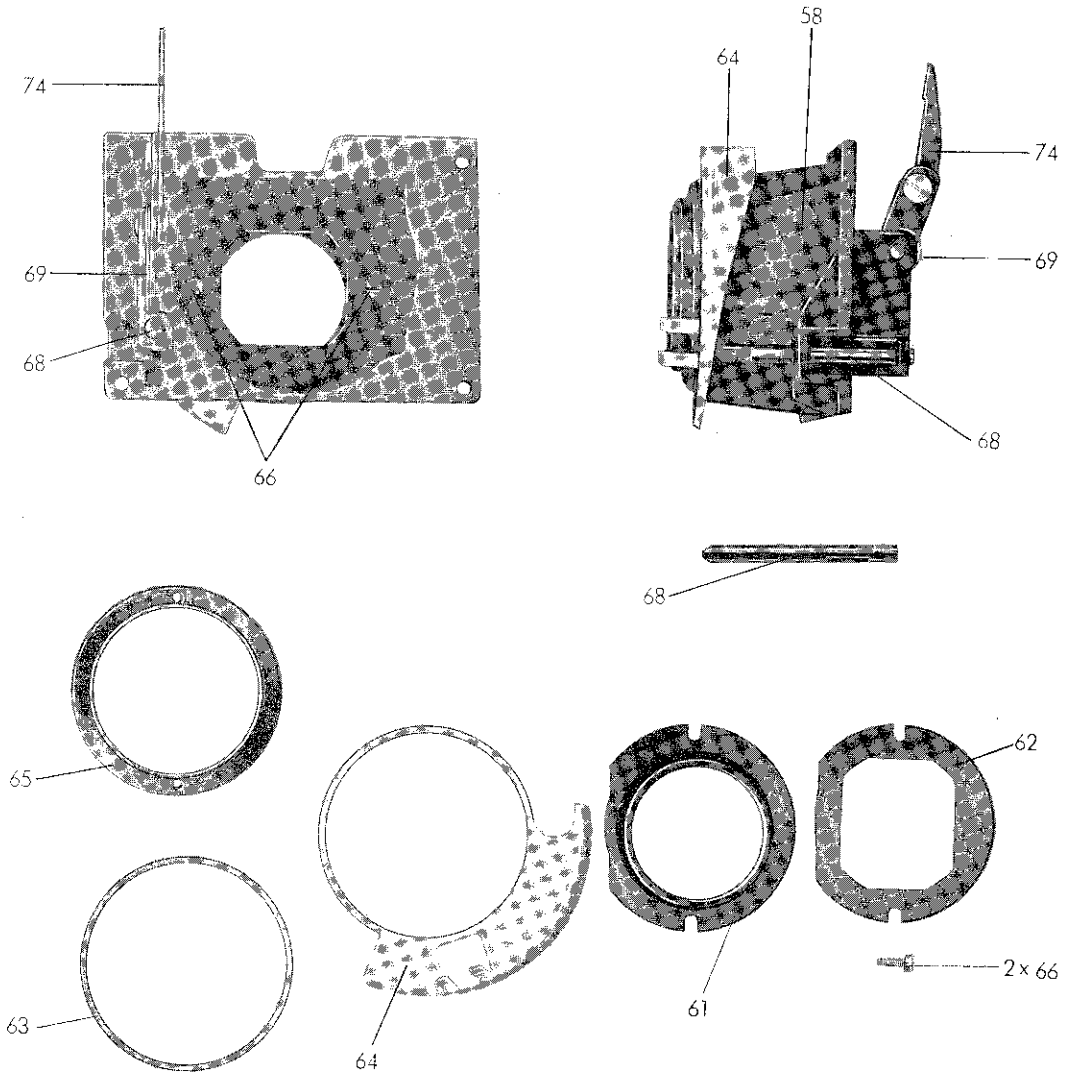
Ill.11


254
267
272
245
3 x 268
2 x 273
286
2 x 45
282
265
246
251
281
278
243
38
181
2 x 183
178
184
182
185
107

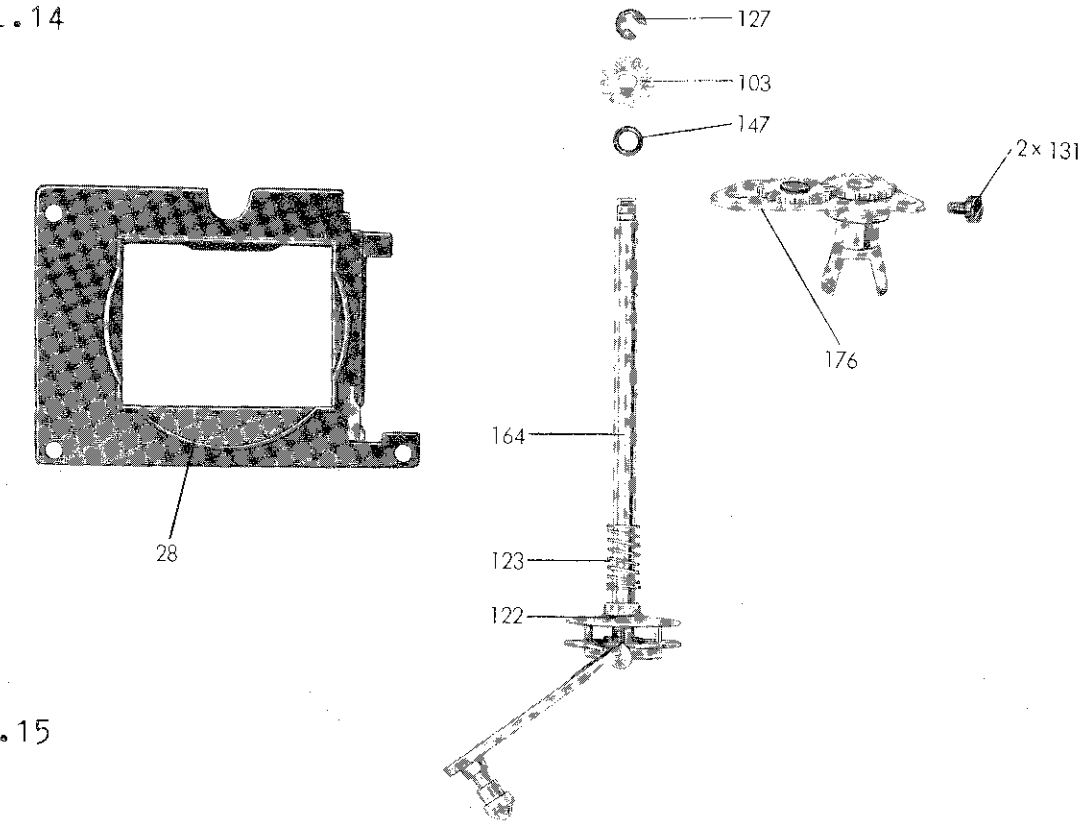
Ill.12


154
153
144
152
2 x 156
157
148
155
43
44
116
114
2 x 115
2 x 134
117
4 x 192
195 (194)
193
82

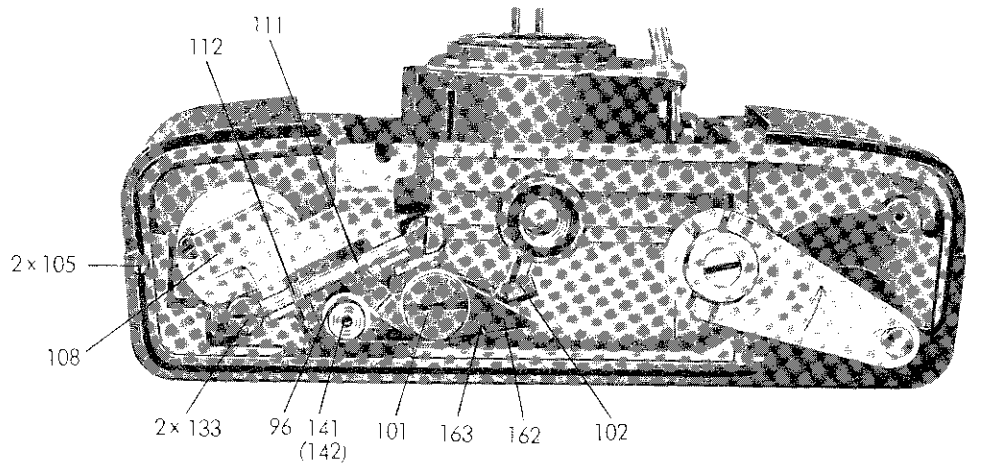
Ill.13

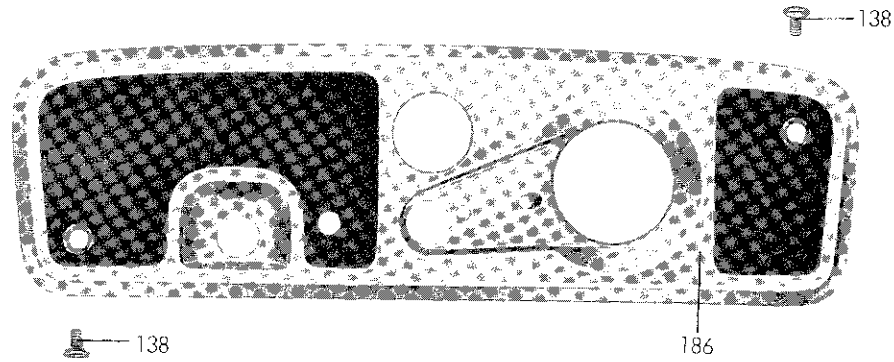

74
69
68
66
58
64
74
69
68
68
65
63
64
61
62
2 x 66

Ill.14

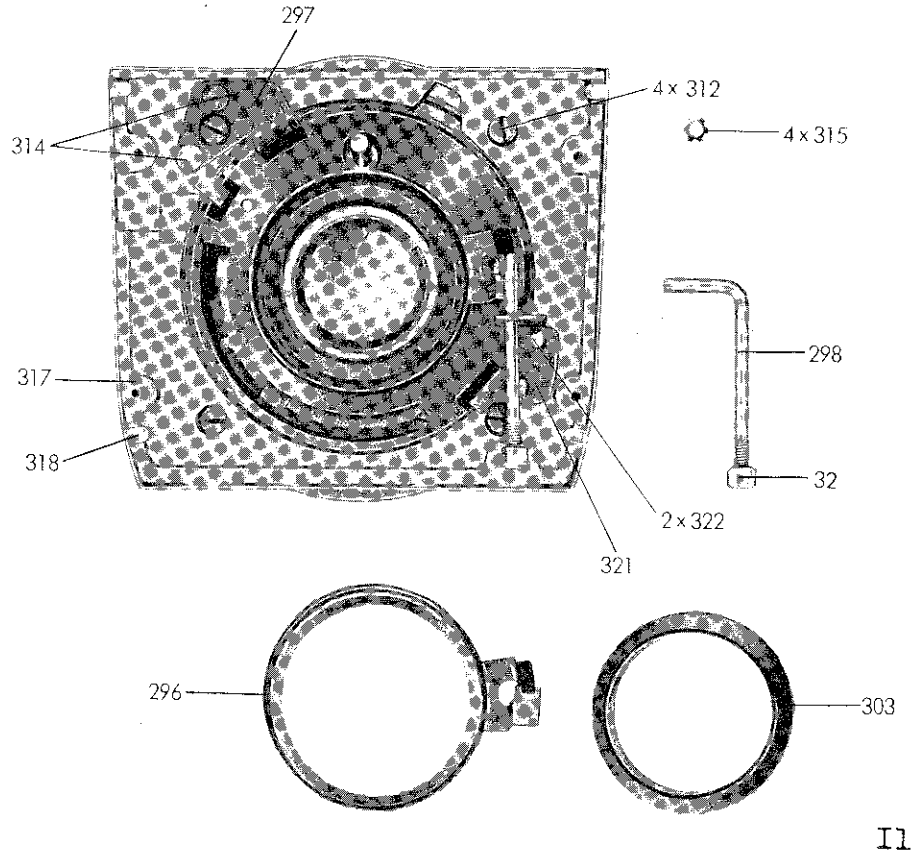

127
103
147
2 x 131
176
28
164
123
122

Ill.15

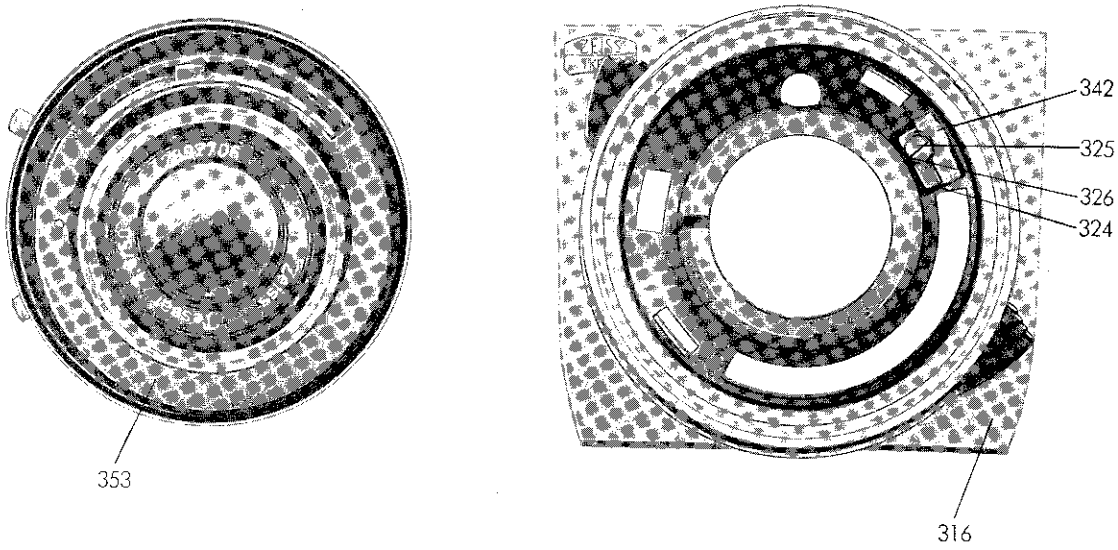

111
112
2 x 105
108
2 x 133
96
141
(142)
101
163
162
102


138
138
186

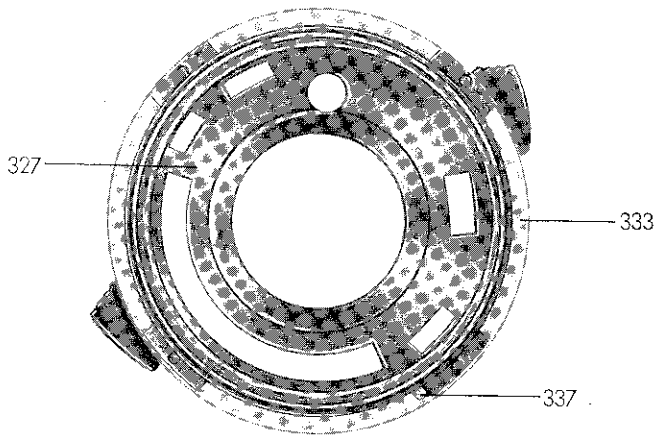
Ill.16


297
4 x 312
4 x 315
314
317
318
298
32
2 x 322
321
296
303

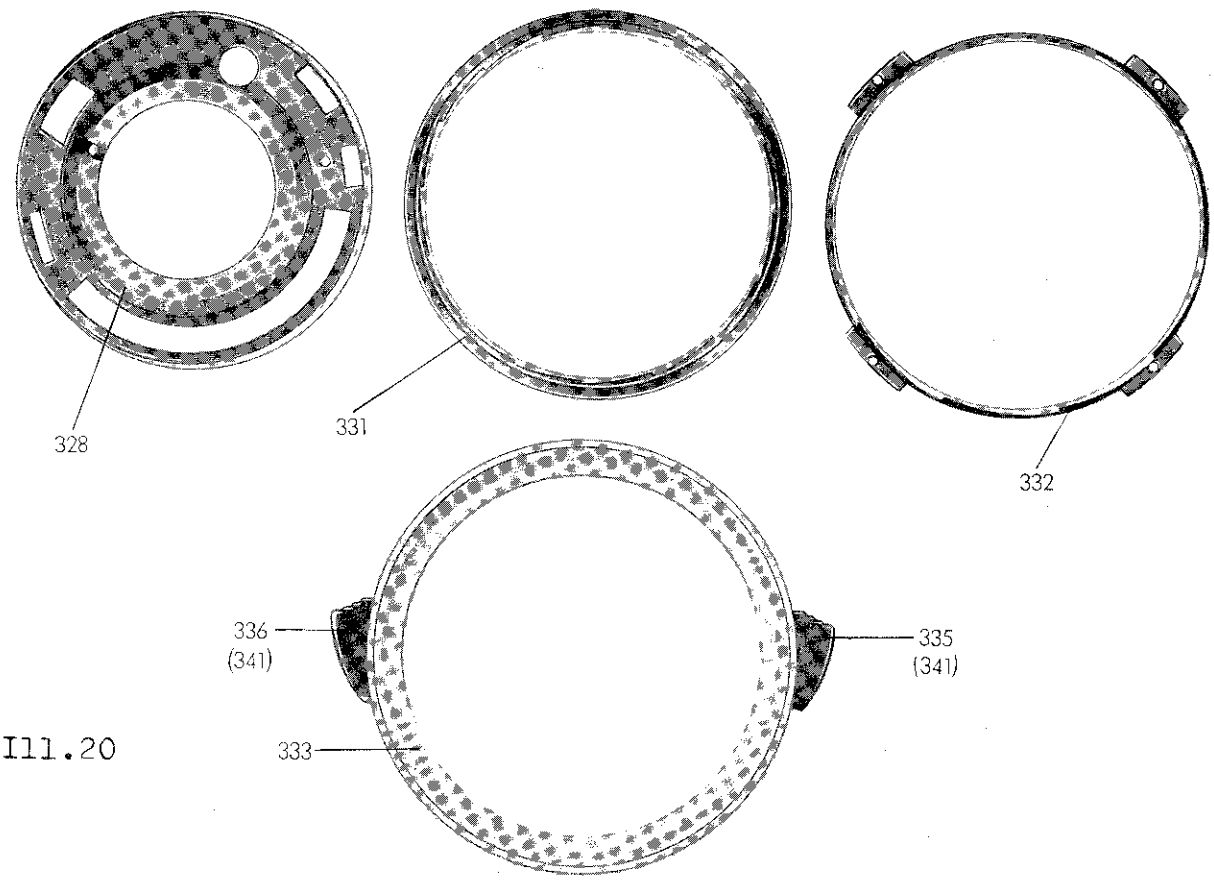
Ill.17



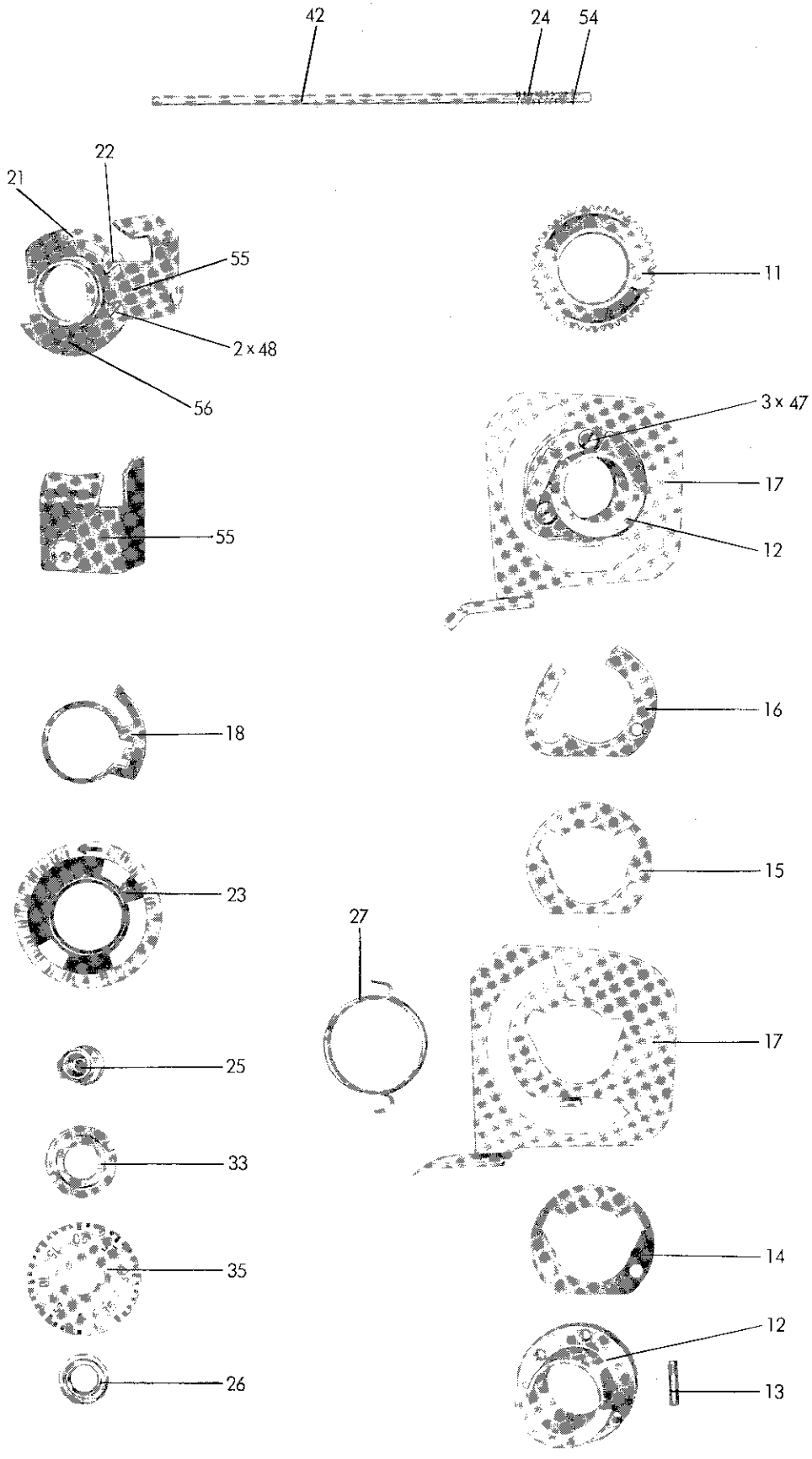
Ill.18



Ill.19



Ill.20


42
24
54
22
21
55
2 x 48
56
11
3 x 47
17
12
55
16
18
15
23
27
17
25
14
33
12
35
13
26

Ill.21

Lubrication Plan Contessa matic E Cat. No. 10.0645

Unit	Component	Lubrication point	Ill.	Lubricant
Body compl. 83	Spool axle 86	Friction and bearing surfaces	page 2	FS 9
	Film sprocket 158	Friction and bearing points	4	FS 9
	Axle 161	Friction and bearing points	page 2	FS 9
	Locking catch 114	Friction points	13	FA 2
	Release flap 108	Bearing points	16	none
	Lever ass. 162	Bearing points	16	OS 1
	Torsion spring 163	Bearing points	16	OS 1
	Lever 102	Bearing points	16	OS 1
	Lever ass. 162	Both ends	16	FM 6
	Slide 107	Friction surfaces	12	OS 1
Plate ass. 176	Traveller	Bearing points	15	OS 1
	Cogwheels	Bearing points	15	OS 1
Traveller ass. 177	Traveller 178	(Teeth and	12	FM 6
	Toothed rod 181	(Slot for shoulder rivet	12	FM 6
	Catch 178	Guide slots	12	FS 9
Baseplate ass. 148	Pinion 154	Bearing points	13	OS 1
	Spur wheel 152	Bearing points	13	OS 1
	Spur wheel 155	Bearing points	13	OS 1
	Spur wheel 157	Bearing points	13	OS 1
	Locking washer 144	Bearing points	13	OS 1
		All teeth of baseplate ass. 174		[illegible]
	Spur wheel ass. 157	Both shoulder rivets	13	FM 6
Tube compl. 58	Cam 64	Cam plate	14	FM 6
	Lever compl. 74	Lever bearing	14	none
	Cam 64	Cam bearing	14	none
	Scanning pin 68	Friction surfaces	14	OS 1
	Winding wheel 38	Bearing	12	OS 1
Spool lever compl. 164	Crank plate	Friction points	15	OS 1
	Spool lever	Friction points	15	OS 1
	Stop plate 122	Bearing points	15	OS 1
Camera back ass. 187	Roller 188	Pivot pins	4	none
	Reminder disc 95	Friction points	13	FA 2
	Threaded pin 105	Hinges	16	none

Unit	Component	Lubrication point	Ill.	Lubricant
Exp.meter housing compl. 212	Plate compl. 286	Bearing points	12	OS 1
	Track for lever 74	Track	12	FS 9
	Lens bearer 251	Slot for adjusting screw	12	FS 9
Front plate compl. 291	Draw rod 298	Friction points	17	FS 9
	Threaded ring ass. 327	(Inner and Outer		
		(multi-start threads	19	FM 1
	Threaded ring 328	Guide slots	20	FM 1
	Film-speed ring 294	Friction surfaces	11	FS 9
	Diaphragm ring 344	(Friction surfaces and (click-stop serrations	11	FS 9
	Shutter-speed ring 301	Friction surfaces	11	FS 9
Camera compl. ass.	Spur wheel 11	Friction and bearing surfaces	21	FM 6
	Sleeve 12	Friction and bearing surfaces	21	OS 1
	Pin 13	Friction points	21	none
	Control ring 23	Bearings	21	none
	Control spring 18	Friction points	21	none
	Release nipple 25	Friction points	21	none
	Release rod 42	Friction points	21	none

Sundry items

Apart from the oils and greases specified in the lubrication plan, the following preparations are also available :

1. Safety lacquer, black
2. Safety lacquer, chromium colour
3. Repair lacquer, black (air-drying)
4. Cement 6 106 or Uhu-plus

Note :

Uhu-plus is a commercial 2-part adhesive which can be used in place of the cement 6 106.

It has the advantage of being ready for use easily and immediately. Uhu-plus can be ordered from us.

Testing Instructions

A. Mechanical tests and controls

Lens and shutter

1. The filter thread M 27 x 0.5 on the front lens should be undamaged.
2. The distance-setting ring 333:
   a) should move smoothly to all settings on the distance scale. The rotational moment over the entire setting range should be uniform and should amount to a maximum value of 800 g at the finger grips.
   b) should have positive stops at either end of its range of movement. At the ∞ stop the setting mark should point to the crossover of the loop; a slight overshoot is permissible at the 0.9-metre or 3-foot stop
3. It should be possible to set the diaphragm ring 344 so that aperture value f/2.8 is opposite shutter-speed setting B and also aperture value f/22 opposite shutter-speed setting 500 (making the necessary alteration to the film-speed setting).
4. The film speed setting ring 294
   a) should be uncoupled when finger pressure is applied to locking spring 352 and permit setting to all values on the film speed scale.
   b) should lock in at all DIN or ASA values and at two intermediate values between each.
5. The shutter speed setting ring 301
   a) should be adjustable to all shutter speed values from 500 to B, according to the settings of the diaphragm ring.
   b) should lock positively at shutter speed settings from 500 to B.
   c) should be moved together with the diaphragm setting ring 344 when the setting mark reaches the aperture values of f/2.8 or f/22.
   d) should be moved when aperture values of f/2.8 or f/22 are reached through adjustment of the diaphragm setting ring.
6. The setting lever for MX synchronization and delayed action
   a) should be adjustable to the M and X positions and lock-in after simultaneously depressing the locking lever. If the locking lever has not been depressed it should not be possible to move the setting lever.
   b) with simultaneous pressure on the locking lever, should only be set to the V position and locked there after the shutter has been tensioned.
   c) should permit re-setting from the V setting without releasing the shutter.
   d) when set to V, should spring back to the X setting from the V position at the moment the shutter has run off.

Camera back

7. The film type indicator should move smoothly when operated with one finger only. Rotational moment at least 150 cmg.
8. When the camera is closed, the back should be flush with the camera body. There should be no more than 0.2 mm play on the side bearing the catch.
9. When operating the locking catch, the camera back should spring open just far enough to be easily opened by hand.

10. The back-locking catch

a) should spring back slightly and lock automatically when the camera back is closed.

b) should lock the back securely so that neither shaking nor tapping by hand will open the camera back.

c) should only slide back to unlock the camera back when a force of at least 300 g is applied.

11. The pressure plate

a) should be undamaged.

b) should exert a pressure of between 500 and 800 g on the outer ribs of the film track.

12. The film guide roller on the back should move easily.

Film transport and frame counter

13. The rapid-wind lever

a) should swing without obstruction towards its stop and with a rotational moment not exceeding 3 000 cmg.

b) should spring back to its initial position, abutting against the stop with at least 200 cmg pressure.

c) should resist being operated if the shutter has not been released beforehand. A very slight play is permissible between the first position and the stop.

14. After winding-on the film, an attempt to move the rapid-wind lever (without releasing the shutter) from its initial position towards the stop, should cause the teeth of the film transport sprocket to move by not more than 1 mm max.

15. One full swing of the rapid-wind lever to its stop

a) should tension the shutter without opening the shutter blades.

b) should rotate the film sprocket roller by 8 teeth (this corresponds to a film advance of 38 mm).

c) should cause the take-up spool (without film) to complete one rotation.

d) should advance the index ring of the frame counter mechanism by one stroke.

16. Swing the rapid-wind lever until it comes to its stop .

Whilst permitting the lever to travel back slowly, it should not be possible to move the film transport roller backwards when the uppermost tooth is subjected to a pressure of 200 g against the direction of the film transport movement. When the lever has reached its initial position, the condition specified under Point 13c should obtain.

17. The release knob with the scale of the frame counter mechanism

a) should occupy such a position that an imaginary line drawn through the scale graduations 10 and 30 runs parallel to the camera back. Permissible deviation $\pm 5^0$. (Fig. 1 facing the rear in direction of the camera back).

b) should be secured against displacement .

c) should be depressed continuously with 1 000 g max. pressure and release the previously-tensioned shutter.

18. The index ring of the frame counter mechanism

a) should move in direction of the arrow. Rotational moment 200 - 350 cmg .

b) lock immediately when turned in the opposite direction .

c) should always be positioned so that the point of the setting mark sets to a graduation stroke on the scale.

19. The take-up spool should rotate on the spindle with a rotational moment of between 140 to 220 cmg.

20. It should be possible to depress the plunger 96 with a pressure of 350-450 g and to lock it in this position, whereby

    a) the rewind crank should spring up from its rest position,

    b) the film transport sprocket roller is decoupled and should move freely in both directions.

21. The plunger 96 should spring back to its rest position when the rewind crank is pressed home again.

22. The rewind crank

    a) should be securely held in its rest position and the film spool catch of rewind should be decoupled.

    b) in its working position, should engage the film spool catch of the rewind when rotated.

23. The winding friction of the film spool catch should not exceed 60 cmg at the rewind.

Exposure meter

24. The exposure meter should be free from dust.

25. The exposure meter pointer should not be obstructed at any point within its normal working range nor should it stick at the stop positions.

26. Zero position

    At 16 ASA, the diaphragm ring 344 should be rotated (in the direction of B) until it comes to its stop. When the photo-cell is completely covered, the meter needle should be clearly within the front triangle (looking towards the lens) of the external meter window.

27. Balance

    The meter should be balanced so that the oscillation of the pointer from the zero position (photo-cell covered) is at most ± 2 1/2 times the width of the pointer, measured with reference to the arrow of the external meter window.

28. The internal and external readings must agree.

B. Electrical tests and measurements

29. The calibration of the exposure meter must conform to values contained in the tables of the Beli-Prüfkoffer VE 33. The maximal deviation permissible is ± 1/2 aperture step value.

30. When the setting lever for MX - synchronization is set to M, a pre-ignition delay should obtain. When set to X, the contacts should be closed at the moment when the shutter is fully open. If the type of repair renders it necessary, tests 31 and 32 may be performed.

31. If a direct current of 500 v or an ac. current of 350 v eff. is placed for 1 second between the nipple bush and jacket, no spark-over should take place.

32. The insulation resistance between nipple and jacket should be at least 10 megohms.

C. Optical controls

Lens

33. The focal plane is the mean film plane and lies 0,18 mm in front of the outer film track ribs (bearing surface of pressure plate). The lens distance settings are relative to the focal plane.

At full aperture, the Tessar f/2.8 , 50 mm should

a) at all settings of the distance scale produce a sharp image in the focal plane at the centre of the film gate, when focused on objects at these distances. For obtaining maximum definition, a setting tolerance for the front lens ring equal to half the depth-of-field range (at full aperture), is permissible on either side of the appropriate nominal value. This corresponds to a variation of $\pm$ 0,04 mm.

b) depict with uniform definiton images of objects at the same distance (the optical axis thereby being at right angles to the focal plane), when the image points form an imaginary circle of 20 mm in diameter in the focal plane, the circle being symmetrical about the centre of the film gate at full aperture. To obtain maximum definition of image points lying on this imaginary circle, a setting tolerance for the focusing ring equal to the full depth-of-field range (at full aperture) is permissible on either side of the appropriate nominal values.

Viewfinder and rangefinder

34. The viewfinder should be free from disturbing reflections.

35. The brightline frame should

a) be aligned parallel to the film gate (not displaced).

b) so aligned that the finder image lies within the tolerance markings given in the viewfinder test table.

36. The bright field of the internal meter indicator should lie as close as possible to the centre of the cut-out in the viewfinder frame. Permissible tolerance : The lateral interspace between the field and the frame should not exceed a ratio of 1 : 2.

37. The vertical positioning of the bright field of the internal meter indicator should be as follows :

a) the lower edge of the field should not lie below the lower edge of the frame;

b) the lower edge of the field should not extend above the upper edge of the frame by morethan the width of the frame.

38. The rangefinder

a) must reveal no distracting reflections or shadows within the rangefinder field ;

b) should reveal no inaccuracies either vertically, or at oo (slight variations are permissible when the eye is allowed to wander from the optical axis of the rangefinder).

D. General Notes

39. The interior of the camera should be free from reflections, that is to say, the negatives should show no trace of [illegible] caused by reflections.

40. A film wound through the camera in both directions should reveal no trace of scratches within the area of the film gate.

41. The lubrication of the camera should be performed according to the lubrication plan.

Zeiss Ikon AG.
Stuttgart

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Published June 1961
Edicion Junio 1961

Ersatzteilliste

List of Spare Parts

Lista de piezas de recambio

Contessa matic E, Kat.-Nr. 10.0645

Für eine schnelle und sachgemäße Bearbeitung eines Ersatzteilauftrages benötigt unser Ersatzteillager alle Angaben aus dem starkumrandeten Teil der Ersatzteilliste.

To ensure quick and proper execution of your spare part order our Spare Part Department requires every information given in the strongly lined column of the List of Spare Parts.

Nuestra sección de piezas de recambio necesita para una ejecución y correcta de sus encargos todos los datos de la parte fuertemente perfilado en la lista de piezas de recambio.

Lfd. Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Fig. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
11	10.0631-00.001	Stirnrad spur wheel Rueda recta	21		1
12	10.0631-00.002	Hülse sleeve Manguito	21		1
13	10.0631-00.003	Stift pin Perno	21		1
14	10.0631-00.004	Scheibe (Papier) washer Disco (papel)	21		1
15	10.0631-00.005	Scheibe washer Arandela	21		1
16	10.0631-00.006	Federscheibe spring plate Arandela elástica	21		1
17	10.0631-00.007	Spannhebel tensioning lever Palanca tensora	4, 21		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. illustr.	Bemerkung Notes Nota	Stück Piece pieza
18	10.0631-00.008	Schaltfeder control spring Muelle de avance	21		1
21	10.0631-00.009	Blattfeder leaf spring Muelle de láminas	21		1
22	10.0631-00.010	Scheibe washer Arandela	21		n.bed. as req. según
23	10.0631-00.011	Schaltring control ring Anillo de avance	2, 21		1
24	10.0622-00.011	Druckfeder pressure spring Muelle de presión	21		1
25	10.0622-00.026	Auslösenippel release nipple Niple de disparo	2, 21		1
26	10.1281-00.056	Mutter nut Tuerca	2, 21		1
27	10.0631-00.012	Drehfeder torsion spring Muelle de torsión	21		1
28	10.0634-00.001 A	Tubus tube Tubo	15		1
31	10.0634-00.006	Schraube screw Tornillo	4		2
32	10.0622-00.041	Schlitzmutter slotted nut Tuerca ranurada	5, 17		1
33	10.0631-00.021	Gewindenippel threaded nipple Niple roscado	21		1
34	10.0635-00.006	Linsenschraube oval-head screw Tornillo de cabeza de lenteja	4, 8		2
35	10.0631-00.024	Zählscheibe counter disc Disco contador	2, 21		1
36	10.0645-00.004	Skala (meter) scale (metre) Escala metros	2		1
37	10.0645-00.005	Skala (feet) scale (feet) Escala (feet)	2		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
38	10.0645-00.006	Aufzugsrad winding wheel Rueda para armar	5, 12		1
41	10.0634-00.014	Platte plate Placa	2		1
42	10.0631-00.013	Auslösestange release rod Varilla de disparo	21		1
43	10.0634-00.015	Feder spring Muelle	13		1
44	10.0634-00.016	Schraube screw Tornillo	13		1
45	M 1,7 x 6,5 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	7, 12		2
46	M 1,7 x 4,5 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	4		4
47	M 1,7 x 4 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	21		3
48	10.0634-00.011	Schraube screw Tornillo	21		2
53	M 1,7 x 4,5 DIN 84	Zylinderschraube cylinder screw Tornillo silíndrico	5		3
54	1,2 DIN 6799	Sicherungsscheibe locking disc. Arandela de aseguramiento	21		1
55	10.0634-00.050-U	Winkel mont. wedge, ass. escuadra mont.	21		1
56	10.0631-00.040-J	Flansch mont. flange, ass. Brida mont.	21		1
57	10.0622-00.090 AU	Andrückplatte mont. pressure plate, ass. Placa de presión mont.	4		1
58	10.0645-00.020-J	Tubus vollst. tube, ass. Tubo mont.	14	mit Kurve 64 with cam 64 con Curva 64	1
61	10.0645-00.007	Ring ring Anillo	14		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
62	10.0645-00.009	Scheibe washer Arandela	14		1
63	10.0645-00.010	Ring ring Anillo	14		1
64	10.0545-00.001	Kurve cam Curva	14		1
65	10.0645-00.002	Ring ring Anillo	14		1
66	M 1,4 x 4 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	14		1
67	10.0645-00.015-U	Tubus mont. tube, compl. Tubo compl.		ohne Kurve 64 without cam 64 sin curva 64	1
68	10.0645-00.016	Taststift scanning pin Clavija de contacto	14		1
69	10.0634-00.032	Feder spring Muelle	14		1
71	10.0634-00.031	Niet rivet Remache			1
72	10.0645-00.017	Tubus tube Tubo			1
73	1,5 x 5 x 0,6 ZIN 2351	Scheibe washer Arandela			1
74	10.0634-00.034-U	Hebel vollst. lever, compl. Palanca compl.	10, 14		1
75	10.0631-00.045 AU	Bezug kompl. covering, compl. Revestimiento compl.			1
76	10.0631-00.046 A	Gehäusebezug body covering Revestimiento de la caja	1		1
77	10.0631-00.047 A	Gehäusebezug body covering Revestimiento de la caja	1		1
78	10.0631-00.048	Bodenbezug base covering Revestimiento del fondo	3		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
81	10.0631-00.049	Bodenbezug base covering Revestimiento del fondo	3		1
82	10.0631-00.050 A	Rückwandbezug camera back covering Revestimiento de la pared trasera	13		1
83	10.0645-01.000	Gehäuse vollst. body, compl. Caja compl.			1
84	10.0645-01.001	Gehäuse body Caja			1
85	10.0622-01.040	Lagerflansch bearing flange Brida de soporte	Seite 2		1
86	10.0622-01.034	Spulenachse spool axle Eje de carrete	Seite 2		1
87	10.0622-01.039	Ring ring Anillo	Seite 2		1
88	10.0622-01.035 C	Druckfeder pressure spring Muelle de presión	Seite 2		1
91	10.0622-01.033	Buchse bush Manguito	Seite 2		1
92	10.0622-01.031	Filmspule film sprocket Carrete de película	4,Seite2		1
93	10.0631-01.002	Stirnrad spur wheel Rueda recta	Seite 2		1
94	10.0631-01.003	Buchse bush Manguito	Seite 2		1
95	10.0631-01.004 A	Buchse bush Manguito	Seite 2		1
96	10.0631-01.005 A	Drücker plunger Pulsador	3, 16, Seite 2		1
97	10.0631-01.006	Druckfeder Pressure spring Muelle de presión	Seite 2		2
98	10.0631-01.007	Achse axle Eje	5		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
101	10.0631-01.008	Exzenter cam Excéntrica	16		1
102	10.0631-01.039	Hebel lever Palanca	16		1
103	10.0631-01.010	Stirnrad spur wheel Rueda recta	10, 15		1
104	10.0631-01.011	Buchse bush Manguito			1
105	10.0631-01.013	Gewindestift threaded pin Perno roscado	16, Seite2		2
106	10.0622-01.029 A	Zapfenschraube trunnion screw Tornillo de espiga	Seite 2		1
107	10.0645-01.002	Schieber slide Corredera	5,10,12		1
108	10.0631-01.014	Auslöseklappe release flap Tapa de disparo	16		1
111	10.0622-01.04[illegible]	Achse axle Eje	16		1
112	10.0631-01.015	Drehfeder torsion spring Muelle de torsión	16		1
113	10.0631-01.016	Sperrfeder locking spring Muelle de bloqueo	10		1
114	10.0631-01.018A	Riegel locking catch Cerrojo	4,13		1
115	10.0631-01.019	Ring ring Anillo	13		2
116	10.0631-01.020	Druckfeder pressure spring Muelle de presión	13		1
117	10.0631-01.021 A	Deckblech cover plate Tapa de chapa	4, 13		1
118	10.0631-01.022	Zugfeder draw spring Muelle de extensión	10		1
119	10.0634-01.003	Schaltdraht control wire Alambre de avance	10		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
120	10.0645-01.027	Isolierstück insulating piece Pieza aisladora	5		1
121	10.0645-01.028	Kontaktfeder contact spring Muelle de contacto	5		1
122	10.0631-01.024	Rastteller drop-in plate Platillo de encaje	15		1
123	10.0631-01.025	Druckfeder pressure spring Muelle de presión	15		1
124	M 1,7 x 5 ZIN 2281	Gewindestift threaded pin Perno roscado	4,Seite 2		1
125	1,8 x 4 x 0,5 ZIN 2351	Scheibe washer Arandela	5		1
126	M 1,7 x 3 ZIN 2515	Zylinderschraube cylinder screw Tornillo cilíndrico	5		1
127	1,5 DIN 6799	Sicherungsscheibe locking washer Disco de aseguramiento	10, 15, Seite 2		2
128	M 1,7 x 7 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	10		2
131	M 1,7 x 3 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	10, 15 Seite 2		4
132	M 1,7 x 3,5 ZIN 2084	Zylinderschraube cylinder screw Tornillo cilíndrico	10		2
133	M 1,7 x 4,5 ZIN 516	Zylinderschraube cylinder screw Tornillo cilíndrico	16		2
134	M 1,7 x 3 ZIN 511	Senkschraube countersunk screw Tornillo embutido	4, 13		2
135	M 1,7 x 2 DIN 927	Zapfenschraube trunnion screw Tornillo con espiga	7		1
136	M 1,7 x 2,5 DIN 553	Gewindestift threaded pin Perno roscado	Seite 2		3
137	M 1,7 x 3 DIN 553	Gewindestift threaded pin Perno roscado	10		1
138	M 1,7 x 3,5 DIN 63	Senkschraube countersunk screw Tornillo embutido	16		2

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
139	2,2 x 4 x 0,1 ZIN 2351	Scheibe washer Arandela	10		1
141	M 1,4 x 3 ZIN 515	Zylinderschraube cylinder screw Tornillo cilíndrico	16,Seite 2		1
142	M 1,4 x 3,5 ZIN 515	Zylinderschraube cylinder screw Tornillo cilíndrico	16,Seite 2		1
143	2,8 x 5,8 x 0,3 ZIN 2351	Scheibe washer Arandela	Seite 2		1
144	3,2 DIN 6799	Sicherungsscheibe lock ing washer Disco de aseguramiento	13,Seite 2		1
145	2 x 0,6 ZIN 2363	Greifring grip ring Anillo de sujeción	10		1
146	3,5 x 5,5 x 0,2 ZIN 2351	Scheibe washer Arandela	Seite 2		1
147	2,5 x 4 x 0,05 ZIN 2351	Scheibe washer Arandela	15		1
148	10.0631-01.029 U	Grundplatte mont. base plate, ass. Placa base mont.	13,Seite 2		1
151	10.0631-01.030	Grundplatte base plate Placa base			1
152	10.0631-01.032	Stirnrad spur wheel Rueda recta	13		1
153	10.0631-01.033	Ansatzniet shoulder rivet Remache de inserción	13		1
154	10.0631-01.034	Ritzel pinion Piñón	13		1
155	10.0631-01.035	Stirnrad spur wheel Rueda recta	13		1
156	10.0631-01.036	Buchse bush Manguito	13		2
157	10.0631-01.039-U	Stirnrad mont. spur wheel, ass. Rueda recta mont.	13,Seite 2		1
158	10.0631-01.045-U	Filmtrommel film sprocket Tambor de película	4,Seite2		1

Lfd. Nr. No. nos. cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
161	10.0631-01.048-U	Achse mont. axle, ass. Eje mont.	Seite 2		1
162	10.0631-01.052-U	Hebel mont. lever, ass Palanca mont.	16		1
163	10.0631-01.055	Drehfeder torsion spring Muelle de torsión	16		1
164	10.0631-01.060-U	Spulhebel vollst. spool lever, compl. Palanca de rebobinado compl.	3,15		1
165	10.0631-01.061	Kurbelteller crank plate Platillo de manivela			1
166	10.0631-01.063	Achse axle Eje			1
167	1 x 3 DIN 1472	Paßkerbstift slotted crossbar pin Clavija hendida de ajuste			2
168	1 x 5 DIN 1475	Knebelkerbstift capstan screw Clavija hendida de muletilla			1
171	3 x 5 x 0,1 ZIN 2351	Scheibe washer Arandela			1
172	10.0631-01.065-U	Spulhebel mont. spool lever, ass. Palanca de rebobinado mont.			1
173	10.0631-01.066	Spulhebel spool lever, Palanca de rebobinado			1
174	10.0631-01.067	Kurbelgriff crank handle Empuñadura de manivela			1
175	10.0631-01.068	Bezug covering Revestimiento	3		1
176	10.0631-01.069-U	Platine mont. bed plate, ass. Platina mont.	10,15		1
177	10.0631-01.073-U	Mitnehmer mont. traveller, ass Arrastrador mont.	10		1
178	10.0631-01.074	Mitnehmer traveller Arrastrador	12		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
181	10.0631-01.075	Zahnstange tooth rod Cremallera	12		1
182	10.0631-01.076	Exzenter cam Excéntrica	12		1
183	10.0631-01.077	Niet rivet Remache	12		2
184	10.0631-01.078 A	Zugfeder draw spring Muelle de extensión	12		1
185	M 1,4 x 2,5 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	12		1
186	10.0631-01.081-U	Kappe mont. capping, ass. Casquete mont.	3, 16, Seite 2		1
187	10.0631-04.000	Rückwand mont. back panel, ass Tapa trasera mont.	4	Siehe Anmerkung Seite 6 see note page 6 Véase nota página 6	1
188	10.1281-09.020	Gleitrolle Film guide roller Rodillo de deslizamiento	4		1
191	10.0631-04.003	Zylinderniet cylinder rivet Remache cilíndrico			1
192	1 x 2,2 ZiN 503	Halbrundniet buttonhead rivet Remache semiesférico	13		4
193	10.0631-04.004 A	Skala scale Escala	13		1
194	10.0631-04.009	Federscheibe spring washer Disco elástico	13		1
195	10.0631-04.007 - U	Merkscheibe mont. counter disc, ass. Disco indicador mont.	13		1
196	10.0645-02.000	Deckkappe vollst. top capping compl. Tapa compl.	2, 8		1
197	10.0645-02.[illegible]00 A	Deckkappe vollst. top capping, compl. Tapa compl.	2, 8		1
198	34.0611-00.060	Steckschuh accessory shoe Zapata	8		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
199	20.1500-00.026	Andrückfeder pressure spring Muelle de presión	8		1
201	10.1281-00.034	Zylinderniet cylinder rivet Remache cilíndrico	8		1
202	10.1281-00.035	Senkniet countersunk rivet Remache embutido	8		2
203	10.0631-02.002	Niet rivet Remache	8		1
204	10.0631-02.004	Suchereinblick finder eyepiece Mirilla del visor	8		1
205	10.0635-02.002	Niet rivet Remache	8		1
206	10.0631-02.103-U	Platte mont. plate, ass. Placa mont.	8		1
207	10.0631-02.005	Feder spring Muelle	8		1
208	10.0631-02.006	Feder spring Muelle	8		1
211	10.0631-02.008-U	Kontaktnippel mont. contact nipple, ass. Niple de contacto mont.			1
212	10.0645-03.000	Beli.-Gehäuse vollst. exp.-mei. housing, compl. Caja del exposímetro cpl.	9		1
213	10.0635-03.001	Beligehäuse exp.-meter housing Caja del exposímetro			1
214	10.0631-03.003	Einblicklinse viewfinder eyepiece Lente del ocular	9		1
215	10.0635-03.005	Spiegel mirror Espejo	9		1
216	10.0635-03.006	Ausblicklinse lens (exit) Lente del objetivo	9		1
217	10.0631-03.012	Feder spring Muelle	9		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
218	10.0631-03.013	Feder spring Muelle	9		1
221	10.0631-03.014	Feder spring Muelle	9		1
222	10.0635-03.003	Feder spring Muelle	9		1
223	10.0645-03.015	Rahmen frame Marco	9		1
224	10.0635-03.007	Blende Aperture Diafragma	9		1
225	10.0635-03.008	Beleuchtungsspiegel mirror Espejo de iluminación	9		1
226	10.0635-03.009	Spiegelhalter mirror holder Portaespejo	9		1
227	10.0635-03.019	Schild screen Placa	9		1
228	10.0635-03.014	Zeigeranschlag pointer stop Tope de aguja	9		2
231	10.0635-03.015	Brücke bridge Puente	9		1
232	10.0635-03.002	Beli - Deckel exp.-met. lid Tapa del exposímetro	7		1
233	10.0622-03.030	Widerstand resistor Resistencia	9		1
234	20.2402-00.028	Heißleiter thermistor Resistencia de compensación	9		1
235	10.1271-05.015	Isolierplatte insulating plate Placa aisladora	9		1
236	10.0635-03.013	Fotoelement photo cell Fotoelemento	9		1
237	10.0634-03.002	Gitterblende baffle Diafragma de rejilla	9		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
238	10.0634-03.003	Wabenscheibe honeycomb disc Disco de panal	9		1
247	10.0634-03.014 B	Plexiglasscheibe plexi-glass sheet Hoja de plexiglas	9		1
242	10.0634-03.017	Feder spring Muelle	9	Siehe Anmerkung Seite 7 see note page 7 Véase nota página 7	1
243	10.0634-03.021	Deckblech cover sheet Tapa	12		1
244	10.0645-03.001	Maske mask Mascarilla	9		1
245	10.0645-03.002	Druckfeder pressure spring Muelle de presión	12		1
246	10.0645-03.003	Achse axle Eje	12		1
247	10.0645-03.004	Linse lens Lente	9		1
248	10.0645-03.005	Maske mask Mascarilla	7	zu 247 for 247 para 247	1
251	10.0645-03.006 A	Linsenträger lens holder (mount) Portalente	12		1
252	10.0645-03.007	Schiebelinse Sliding lens Lente desplazable	9		1
253	10.0635-03.030	Einlage stuffing Pieza de inserción	9		1
254	10.0645-03.008	Schraube screw Tornillo	9, 12		1
255	10.0635-03.031	Einlage stuffing Pieza de inserción	9		1
256	10.0645-03.009	Spiegel mirror Espejo	9		1
257	10.0634-03.024	Abdeckplättchen cover plate Plaquita para tapar		zu 232 for 232 para 232	

Lfd.Nr. No. nos.cont	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
258	10.0622-03.023	Papierstreifen paper strip Tira de papel	9		2
261	10.0634-03.018 A	Scheibe washer Arandela	9		1
262	10.0645-03.012	Einlage stuffing Pieza de inserción	9		1
263	10.0645-03.013	Glasscheibe glass plate Hoja de vidrio	9	Siehe Anmerkung Seite 7 see note page 7 Véase nota página 7	1
264	10.0635-03.020	Klammer clamp Abrazadera	9		1
265	10.0645-03.014	Feder spring Muelle	12		1
266	M 1,7 x 3 DIN 551	Gewindestift threaded pin Perno roscado	9		1
267	M 1,7 x 6 ZIN 2551	Gewindestift threaded pin Perno roscado	12		1
268	M 1,7 x 2 DIN 551	Gewindestift threaded pin Perno roscado	12		3
271	M 1,7 x 2,5 DIN 551	Gewindestift threaded pin Perno roscado	9		3
272	M 1,7 DIN 546	Schlitzmutter slotted nut Tuerca ranurada	12		1
273	M 1,7 x 2,5 ZIN 515	Zylinderschraube cylinder screw Tornillo cilíndrico	9,12		4
274	M 1,7 x 3,5 ZIN 515	Zylinderschraube cylinder screw Tornillo cilíndrico	7		2
275	M 1,7 x 2,5 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	9		2
276	M 1,7 x 3 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	9		1
277	2 x 4 x 0,5 ZIN 2351	Scheibe washer Arandela	9		1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	ill. *Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
278	M 1,7 x 2,5 ZIN 2084	Zylinderschraube cylinder screw Tornillo cilíndrico	12		1
281	M 1,7 x 4,5 ZIN 2551	Gewindestift threaded pin Perno roscado	9,12		1
282	M 1,7 x 2,5 ZIN 2515	Zylinderschraube cylinder screw Tornillo cilíndrico	12		1
284	10.1271-05.016	Kontaktplatte contact plate Placa de contacto	9		1
285	10.1271-00.016	Kontaktfeder contact spring Muelle de contacto	9		2
286	10.0635-03.021-U	Platine vollst. bed-plate compl. Platina compl.	12		1
287	10.0635-04.000	Instrumenten-Gehäuse vollst. exp.met.housing, compl. Caja de instrumento compl.	7		1
288	20.2533	K - Instrument k-instrument Instrumento K			1
291	10.0645-05.000	Frontplatte vollst. front panel, compl. Placa frontal compl.	6		1
292	10.0645-05.001	Frontring front ring Anillo frontal	1, 11		1
293	10.0645-05.002	Zeit-Skalenring speed scale ring Anillo con escala de velocidades	2, 3, 11		1
294	10.0645-05.003	Empfindlichkeitsring [illegible] Anillo de sensibilidades	2, 11		1
295	10.0645-05.004	Skala scale Escala	3		1
296	10.0645-05.005	Auslösering release ring Anillo de disparo	17		1
297	10.0645-05.006	Winkel wedge Escuadra	5,17		1
298	10.0645-05.007	Stange rod Varilla	5,17		1
					1

Lfd.Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
301	10.0645-05.008	Zeit-Einstellring speed setting ring Anillo para la graduación de velocidades	1,2,3,11		1
302	10.1281-00.074	Schraube screw Tornillo	3,11		4
303	10.0645-05.009	Anschraubring screw-on-ring Anillo para atornillar	17		1
304	10.0645-05.010	Skala (DIN) scale (DIN) escala (DIN)	3, 11		1
305	10.0645-05.011	Skala (ASA) scale (ASA) Escala (ASA)	3, 11		1
306	51 x 53,5 x 0,2 ZIN 2351	Scheibe 0,2 mm washer 0,2 mm Arandela 0,2 mm	11		n. Bed. as req. a discr.
307	51 x 53,5 x 0,1 ZIN 2351	Scheibe 0,1 mm washer 0,1 mm Arandela 0,1 mm	11		n.Bed. as req. a discr.
308	10.0634-00.012	Scheibe 0,05 mm washer 0,05 mm Arandela 0,05 mm	11		n.Bed. as req. a discr.
309	10.0634-00.013	Scheibe 0,1 mm washer 0,1 mm Arandela 0,1 mm	11		n.Bed. as req. a discr.
310	M 1,7 x 3 DIN 920	Linsenschraube ovalheaded screw Tornillo de cabeza de lenteja	1, 11		2
311	M 1,2 x 1,5 ZIN 515	Zylinderschraube cylinder screw Tornillo cilíndrico	1		2
312	M 1,7 x 3 DIN 84	Zylinderschraube cylinder screw Tornillo cilíndrico	5, 17		4
313	M 1,7 x 2,5 x 1,5 ZIN 2926	Gewindestift threaded pin Perno roscado	3, 11		1
314	M 1,7 x 2,5 ZIN 208+	Zylinderschraube cylinder screw Tornillo cilíndrico	5, 17		2
315	J 1,8 DIN 6797	Zahnscheibe toothed wheel Disco dentado	5, 17		4
316	10.0645-05.025-U	Frontplatte mont. front plate ass. Placa frontal mont.	18	ohne 327 u. 333 without 327 u. 333 sin 327 u. 333	1

Lfd. Nr. No. nos.cont.	Bestellnummer Order No. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
317	10.0645-05.026	Frontplatte front plate Placa frontal	17		1
318	10.0645-05.027	Kappe capping Casquete	17		1
321	10.0645-05.028	Führungsblech guide sheet Chapa guía	17		1
322	1,5 x 3,5 ZIN 503	Halbrundniet buttonhead rivet Remache semiesférico	17,		2
324	10.0645-05.036	Isolierstück insulating piece Pieza aisladora	18		1
325	20.0298-00.002	Linsenschraube ovalheaded screw Tornillo de cabeza de lenteja	18		1
326	1,8 x 4 x 0,3 ZIN 2351	Scheibe washer Arandela	18		1
327	10.0645-05.047-U	Gewindering mont. threaded ring ass Anillo con rosca mont.	19	Besteht aus 328, 331 u.332 consists of 328, 331 and 332 consiste de 328,331 y 332	1
328	10.0645-05.048	Gewindering (innen) threaded ring (inside) Anillo con rosca (interior)	20		1
331	10.0645-05.049	Gewindering threaded ring Anillo con rosca	20		1
332	10.0645-05.050	Gewindering(aussen) threaded ring (outside) Anillo con rosca (exterior)	20		1
333	10.0645-05.052-U	Einstellring mont. setting ring, ass. Anillo de ajuste mont.	2,3,19,20		1
334	10.0645-05.035	Ring ring Anillo		zu 333 for 333 para 333	1
335	10.0645-05.038	Griff grip Asidero	1,2,3, 20		1
336	10.0645-05.039	Griff grip Asidero	1, 2, 20		1
337	1,5 x 6 DIN 1474	Steckkerbstift slotted pin Clavija hendida de enchufe	19		1

Lfd.Nr. No. nos.cont	Bestellnummer Order Nr. número de pedido	Bezeichnung Name of part designación	Ill. Ill. ilustr.	Bemerkung Notes Nota	Stück Piece pieza
338	M 1,7 x 2,5 DIN 553	Gewindestift threaded pin Perno roscado	3		3
341	M 1,7 x 5 DIN 85	Linsenschraube ovalheaded screw Tornillo con cabeza de lenteja	2,3, 20		2
342	10.0645-05.055 - U	Kontaktfeder contact spring Muelle de contacto	18		1
344	10.0645-05.058-U	Blendenring mont. aperture ring, ass. Anillo de diafragmas mont.	2, 3, 11		1
345	10.0645-05.059	Ring ring Anillo		zu 344 for 344 para 344	1
346	10.0645-05.060	Griff grip Asidero	1, 11		1
347	10.0645-05.061	Griff grip Asidero	1, 3, 11		1
348	1 x 3,2 ZIN 503	Halbrundniet bottonhead rivet Remache semiesférоco	11		2
351	1,2 x 3,5 DIN 1472	Paßkerbstift slotted crossbar pin Clavija hendida de ajuste	11		1
352	10.0645-05.069-U	Feder mont. spring, ass. Muelle mont.	3, 11		1
353	10.0645-06.000	Verschluß Prontor SLK X 481 shutter Prontor SLK X 481 Obturador Prontor SLK X 481	18	mit Objektiv with lens con objetivo	1
354	10.0645-06.001	Verschluß Prontor SLK X 481c shutter Prontor SLK X 481c Obturador X 481 c Prontor SLK		ohne Objektiv without lens sin objetivo	1
355	10.0645-06.003-U	Ring vollst. ring compl. Anillo compl.	2		1
356	10.0645-06.004	Ring ring Anillo			1
357	M 1,2 x 2,5 DIN 553	Gewindestift threaded pin Perno roscado	2		3

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Special tools for Contessa matic E, Cat. No. 10.0645

The following special tools are required for servicing the Contessa matic E :

	Order No.
Weight for rewind friction	54-00.000 /703
Key for winding shutter	62-00.000 /801
Pliers for nut	527/24 CM / 82
Key for threaded nipple (in place of 527/24 CM/80)	56-00.000 /800
Special screwdriver for slotted nut	26 376 T / 80
Tensioning key	527/24 / 82
Shearing tool for counter disc	527/24 CM /81
Pliers for nut	527/24 CM /83
Special screwdriver for front plate	526/24 M /81
Rotation-moment tester for film spool	526/24 M /72
Key for opening shutter	56-05.000 /800
Key for rear lens element	54-06.000 /800
Spanner for cam	52-01.076 /800

All the special tools listed above for use with the Contessa matic E are already employed with the Symbolica 10.0635, Tenax 10.0651 and Contessa matic 10.0634.

New tools required :

Special screwdriver for adjusting rangefinder	55-00.000 /805
Key for shutter mount	55-00.000 /806

Zeiss Ikon AG
Stuttgart